Supreme Court, U.S.
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(2)

No. 94-1131

IN THE
Supreme Court of the United States
OCTOBER TERM, 1994

CHRYSLER CORPORATION, AND
AMERICAN MOTORS CORPORATION,
Petitioners,

v.

ROBERT W. KEARNS,
Respondent.

On Petiton for Writ of Certiorari to the United States Court of Appeals for the Federal Circuit

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RESPONDENT' S RESPONSE TO PETITION FOR WRIT OF CERTIORARI

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88 pp

DISCLAIMER

Through adjudged and alleged infringement by defendants who are under the subject matter and personal jurisdiction of this U.S. Supreme Court 700 million Intermittent Windshield Wiper features have been added to the roads.

In the model years 1965 through 1968 the Ford Motor Company offered Intermittent Windshield Wiper Systems supplied to Ford by the Trico Products Corporation of Buffalo, N.Y. It was recognized and acknowledged in Trico's U.S. Patents, 3,110,056 by Oishei et al. and 3,339,123 by Reister that when the accumulation increases in the windshield wiping area visibility is impaired. In its patent specification Trico complied with 35 U.S. Code § 112 to **set forth the best mode contemplated by the inventor for carrying out his invention as did Dr. Kearns.**

Trico used engine vacuum in the operation of its Intermittent Windshield Wiper System and provided a vacuum operated switch **44** as a safety escape from dwell. Dr. Kearns' Intermittent Windshield Wiper Systems sensed the moisture in the windshield wiping area to skip the dwell period at the end of the current wiping stroke if dwell was not safe.

Infringers are not hampered by the law. None of the infringers who took Dr. Kearns' Intermittent Windshield Wiper Systems inventions took the accompanying safety provisions published in the U.S. Patent literature.

In all the years of the Vietnam War there were not as many as 55,000 U.S. citizens killed, yet <u>each year</u> on U.S. roads 55,000 die in automobile accidents. More than half of those accidents occur in wet weather yet the weather is not wet half the time.

Dr. Kearns believes the Intermittent Windshield Wiper feature assembled into Chrysler products is inherently dangerous. Dr. Kearns invented Windshield Wiper System with Intermittent Operation to reduce wet weather accidents. The opposite has occurred. Dr. Kearns disclaims the responsibility for the infringements and for allowing the infringers to continue sales.

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CONSTITUTIONAL PROVISION INVOLVED

Article I, Section 8, Clause 8

"The Congress shall have the power:

To promote the progress of science and the useful arts by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries."

TREATY INVOLVED

General Agreement on Tariffs and Trade ("GATT") to the Uruguay Round Agreements was signed on April 15, 1994, submitted to Congress on September 27, 1994 and enacted on January , 1995 and includes in relevant part at (15) The Agreement on Trade-Related Aspects of Intellectual Property Rights which in turn includes in relevant part:

PART I
GENERAL PROVISIONS AND BASIC PRINCIPLES

Article 1
Nature and Scope of Obligations

1. Members shall give effect to the provisions of this Agreement. Members may, but shall not be obliged to, implement in their law more extensive protection than is required by this Agreement, provided that such protection does not contravene the provisions of this Agreement. Members shall be free to determine the appropriate method of implementing the provisions of the Agreement within their own legal system and practice.

PART III
ENFORCEMENT OF INTELLECTUAL PROPERTY RIGHTS

SECTION 1: GENERAL OBLIGATIONS

Article 41

1. Members shall ensure that enforcement procedures as

specified in this Part are available under their law so as to permit effective action against any act of infringement of intellectual property rights covered by this Agreement, including expeditious remedies to prevent infringements and remedies which constitute a deterrent to further infringements. These procedures shall be applied in such a manner as to avoid the creation of barriers to legitimate trade and to provide for safeguards against their abuse.

Article 46

Other Remedies

In order to create an effective deterrent to infringement, the judicial authorities shall have the authority to order that goods that they have found to be infringing be, without compensation of any sort, disposed of outside the channels of commerce in such a manner as to avoid any harm to the right holder, or, unless this would be contrary to existing constitutional requirements, destroyed. The judicial authorities shall also have the authority to order that materials and implements the predominant use of which has been in the creation of the infringing goods be, without compensation of any sort, disposed of outside the channels of commerce in such a manner as to minimize the risks of further infringements. In considering such requests, the need for proportionality between the seriousness of the infringement and the remedies ordered as well as the interests of third parties shall be taken into account.

STATUTES INVOLVED

35 U.S.C. Patents, provides:

APPLICATION FOR PATENT

§ 112. Specification

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any

person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same, **and shall set forth the best mode contemplated by the inventor for carrying out his invention.**

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

An element in a claim for a combination may be expressed as a means or step for performing a specified function without the recital of structure, material, or acts in support thereof, and such claim shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof. July 19, 1952, c. 950, § 1, 66 Stat. 798.

35 U.S.C. § 281, Patents, provides:

> **§ 281. Remedy for infringement of patent:**
> A patentee shall have remedy by civil action for infringement of his patent. July 19, 1952, c. 950, § 1, 66 Stat. 812.

35 U.S.C. § 283, Patents, provides:

> **§ 283. Injunction:**
> The several courts having jurisdiction of cases under this title may grant injunctions in accordance with the principles of equity to prevent the violation of any right secured by patent, on such terms as the court deems reasonable. July 19, 1952, c. 950, § 1, 66 Stat. 812.

SIXTH CIRCUIT RULE INVOLVED

That a Senior Judge cannot adjudge a case outside his district if a case on his docket is there for more than five years.

TITLE 28 § 1654 RULE INVOLVED

§ 1654. Appearance personally or by counsel

In all courts of the United States the parties may plead and conduct their own cases personally or by counsel as, by

the rules of such courts, respectively, are permitted to manage and conduct causes therein. (As amended May 24, 1949, c. 139, § 91, 63 Stat. 103.)

ADDITIONS AND CORRECTIONS TO STATEMENT OF THE CASE

As an inventor, Dr. Kearns believed:

> "(T)he patent system provides a **protected market** with the opportunity for **unusual profit** necessary to justify the heavy investment in time, effort, and capital necessary to bring the improvement to the public. This same **protected market** provides an **entering wedge** by which a business enterprise entering a new field can overcome the obstacles that otherwise discourage entry into an industry already populated[1]." page 5 of Study No. 2 of the Subcomm. on Patents, Trademarks and Copyrights of the Senate Comm. on the Judiciary, 84th Cong., 2d sess. (1957), entitled *The Patent System and the Modern Economy*.

In 1957 he founded Kearns *Engineers* to manufacture the U.S. and foreign patented products he invents.

35 patents in
Intermittent Windshield
Wiper Systems

Dr. Kearns has been awarded 29 U.S. patents. Nominally, he has been awarded 12 foreign patents with other foreign patents pending. Thirty-five (35) of those patents and the foreign patents pending are in the art of Intermittent Windshield Wiper System ("IWWS").

Dr. Kearns has never licensed any of the patents he has been awarded.

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[1] Congressional Library Microfilm #11997.

Computer Central© exported to France and Japan

Dr. Kearns has supplied one of his patented inventions to Chrysler's Missile Division.

Dr. Kearns supplied with his quotation to Chrysler Corporation's purchasing department 20 pre-production IWWS electronic modules (A. 1) that Kearns *Engineers* personnel pre-tested against Chrysler Performance Standard PS-6338. Dr. Kearns sought a waiver from PS-6338 and provided the 20 pre-production IWWS electronic modules with his moisture sensitivity skip feature. The waiver he sought from PS-6338 was only that the wiper blades had to touch and wipe a windshield during test.

Dr. Kearns supplied with his quotations to both Daimler-Benz ("Mercedes") Aktiengesellschaft and, to Dr. Ing. h.c.f. Porsche A.G. two of the pre-production IWWS electronic modules.

Dr. Kearns demonstrated his IWWS to personnel of the Ford Motor Company, Chrysler Corporation and General Motors Corporation among others.

He supplied another of his inventions[2] from 1964 through 1978 to companies and universities located throughout the U.S. (CAFC Appendix pp. 904 to 1445) and through export licenses issued by the U.S. Department of Commerce to France and Japan (A. 2).

Civil actions

Dr. Kearns demonstrated the external features of his IWWS to Ford and Chrysler engineers in October 1963. Dr. Kearns demonstrated the features of his IWWS to an array of personnel of General Motors Corporation and built his IWWS into a General Motors' model of automobile. Dr. Kearns was awarded a doctorate in engineering from Case Institute of Technology the following June.

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[2] Dr. Kearns' manufactured-inventions were sold under the U.S. trademark *Computer Central*© as shown at (A. 1-2).

IWW features are assembled into models of every automobile assembled in the western world. Dr. Kearns sought IWWS supply contracts from every automobile assembler in the western world. Through infringement of Dr. Kearns' patents each automotive assembler in the western world controls its segment of the market comprising the industry. (A. 3-5)

Dr. Kearns has or maintains civil actions for infringement against every assembler of automobiles in the western world except Fiat[3]. Dr. Kearns had positioned himself to be a major supplier of IWWS to the automotive industry if his U.S. patents were enforced under 35 U.S.C., as acknowledged by District Judge Pratt in denying Dr. Kearns his Motion for a Preliminary Injunction filed in 1979. (A. 6-11)

Adjudged infringers

The Ford Motor Company lawyers admitted that all 20.5 million of their electronic IWWS sold, which included IWW features sold by Ford to American Motors Corporation, infringed Dr. Kearns' patents if his patents were valid. Chrysler Corporation and American Motors Corporation lawyers stipulated to be bound by the validity trial in *Kearns* v. *Ford Motor Co.*, 726 F. Supp. 59 (E.D. Mich. 1989) ("*Ford*"). The *Ford* jury found all six of Dr. Kearns' U.S. patents litigated in that trial to be valid. The *Chrysler and American Motors* jury found all four of the six *Ford* patents litigated in the *Chrysler and American Motors* trial to be infringed. Dr. Kearns, his lawyers, and, his patent expert found in preparing for the *Kearns* v. *General Motors* trial that General Motors Corporation infringed 207 claims of nine of Dr. Kearns' U.S. patents.

All the civil actions were filed in the U.S. District Court in Detroit, Michigan.

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[3] Fiat no longer does business in the U.S.

Kearns *Engineers* expansion

In 1957 at age 30, Dr. Kearns, with his Masters (M.S.E.M.), founded Kearns *Engineers* in Detroit, Michigan to manufacture and sell his patented products. In 1958 Kearns & Law *Engineers* expanded to Livonia, Michigan. (CAFC A-1122) In 1960, Kearns & Law *Engineers* expanded a second time back into Detroit, Michigan. (CAFC A-1098)

Seeking specifications

On October 29, 1963, Dr. Kearns contacted management at the Chrysler Engineering Center in Highland Park, Michigan to speak to windshield wiper engineers to obtain engineering specifications of the automotive environment to complete his work on Intermittent Windshield Wiper Systems ("IWWS").

Chrysler management first required Dr. Kearns to sign a Non-Confidential Disclosure Agreement. That Agreement stated that Chrysler would "respect valid U.S. patents." Dr. Kearns signed the Agreement and, secondly, at the request of management, demonstrated to four managers of Product Planning for each car line, the external features of his IWWS which he had installed on a 1962 Ford Galaxie convertible. That IWWS provided a continuously-variable continuous speed driver-rotated control in the continuous position of the driver-controlled-wiper-switch and a variable-dwell continuously-variable continuous dwell period in the 'park' position with the same driver-rotated control when the driver-controlled-wiper-switch was in the intermittent position.

Third, management allowed Dr. Kearns to talk to the windshield wiper lab supervisor and his assistant, but they provided no specifications to Dr. Kearns.

The week before Dr. Kearns went to Chrysler seeking specifications, he had gone twice to the Ford Motor Company engineering center seeking automobile environmental specifications for his IWWS. Again, Dr. Kearns was required to sign a Non-Confidential Disclosure Agreement prior to talking to their engineers.

Ford's Agreement said they would honor U.S. patents. Accordingly, Dr. Kearns signed that Agreement and demonstrated his IWWS to Ford general parts division management and numerous windshield wiper engineers.

Dr. Kearns learned during the demonstrations that the environment under the hood was 270° F. and that the wiper motor had to be subjected to 3 million cycles in a life test. Mr. Neill, the manager, requested an approximate price for an IWWS.

Disappointed, as he had expected more specifications, Dr. Kearns went to Chrysler, was disappointed again and returned to his laboratory where he succeeded on June 29, 1964 in being able to adapt his IWWS technology for any temperature and then started his life test which completed 3.4 million cycles on November 16, 1964. He filed a specification for his first IWWS U.S. patent on December 1, 1964. (A. 12)

Kearns' pre-trial contacts
with Chrysler personnel

It was 17 years before trial, that Dr. Kearns sought automotive environmental specifications to complete his development work on IWWS - October 29, 1963 from Chrysler Engineering personnel.

On December 9, 1964, Dr. Kearns again demonstrated his IWWS to Chrysler engineers who received a complete schematic engineering drawing (CAFC A-134)(Court of Appeals for the Federal Circuit Appendix page 134) of Dr. Kearns' IWWS. On January 16, 1965, Dr. Kearns received a copy of S.R.Ward's drawing of Dr. Kearns' IWWS in a Chrysler windshield wiper system. (CAFC A-140)

On February 5, 1965, an IWWS in Chrysler cars "had been approved by all concerned." (CAFC A-146)

Mr. Bouwkamp, Chief Engineer & Manager of Dodge Product Planning tested a car for nine months that contained a Dr. Kearns' IWWS. (CAFC A-147)

On May 1, 1968, Dr. Kearns had prepared a PROPOSED

CHRYSLER CIRCUITS and PATENTABILITY FEATURES REPORT for Glen Farison who reported to Chrysler's Chief Patent Counsel. (CAFC A-151; -154) Fig. I-1 of that report will be important shortly. (CAFC A-158)(A. 13-14)

On February 23, 1972 Ford raised the defense of the invalidity of Dr. Kearns' patents.

On May 23, 1974, Chrysler's Sourcing Committee acknowledged that Chrysler's competitors used 2-continuous speeds plus intermittent and predicted a "recurring profit of 13.4 million annually" from the use of IWWS. (CAFC A-198)

Mercedes sought a quotation from Kearns Engineers for its worldwide production needs. (CAFC A-481 to -584). Kearns Engineers quoted Mercedes, Porsche and Chrysler. (CAFC A-587, 589, 1032)

On June 16, 1974, a Source Planning Letter was **released** for a 2-continuous speed IWWS for Job #1 1977 (to be in dealer's showrooms by August 1976).

On June 14, 1974, Chrysler engineer, Mr. Orris submitted a patent disclosure for an IWWS.

On July 10, 1975, Chrysler's patent counsel, Mr. Santo held a meeting in his office with Mr. Orris at which they discussed the Kearns patents, with Mr. Santo discussing specific Kearns patents '836, '374 and '178 which he thought was "involved on the controller portion for the intermittent wipe system per se." Mr. Santo informed Mr. Orris that Chrysler was setting up a $500,000 fund "for when the patentees would present a charge of patent infringement." (CAFC A-368)

Fourteen days later, on July 24, 1975, Mr. Santo wrote to engineering the results to date of his patent investigation. The three Chrysler IWWS designs developed over the past two years had "objectional aspects" (CAFC A-376) found by the Huntsville, AL reliability engineers (CAFC A-365) (A. 15-16).

Nineteen days after the Santo-Orris meeting, Mr. Orris 'conc-

eived' as his own (A. 18-20) Dr. Kearns' Fig. I-1 given to Mr. Farison (A. 13-14); Dr. Kearns' '836 Fig. 1 (A. 12); Dr. Kearns' '178 Fig. 1 (A. 17). Dr. Kearns submitted Fig. I-1 to Chrysler because their wiper motor used a one-movable-contact one-stationary-contact motor driven switch. On August 11, 1975 Mr. Orris made the final conception circuit shown at CAFC A-390.(A. 21).

Notice there is no #58 resistor in series with the input of the transistor as there is shown in Dr. Kearns' '178 Fig. 1. (A. 17) On January 5, 1979 an Engineering Change Order was issued to install the missing #58 resistor (CAFC A-416). On 25 January 1979 a second Engineering Change Order was entered to change the motor-driven switch to the one-movable-contact two-stationary-contacts motor-driven switch used by Dr. Kearns in his patents to make the copying complete **except for Dr. Kearns' moisture responsive dwell period**. (CAFC A-426)

On August 8, 1975 a memorandum by F. Zubrzycki of Dept. 3840 confirmed Chrysler management had established the $500-,000 fund. (CAFC A-388)

Chrysler presented no evidence that management ever withdrew the $500,000 patent liability fund.

Subcontractor agreements

During this time, Dr. Kearns and his family started to manufacture and sell through Kearns *Engineers* other of his patented products throughout the USA (CAFC A-1389-1424) under the trademark *Computer Central*©. (CAFC A-904-947) Still later, Dr. Kearns and his family, through export licenses issued by the U.S. Department of Commerce sold the *Computer Central*© patented products in France and Japan. (CAFC A-604) (A. 1) Dr. Kearns advertised his patented products in technical magazines. (CAFC A-1369 to 1385)

Dr. Kearns' IWWS patents Constitutionally permit him the exclusive right to supply a IWWS sub-assembly for automobile-assembler installation.

Accordingly, in an effort to set up the manufacturing of Dr. Kearns' products, Dr. Kearns, through Kearns *Engineers*, entered into agreements: on 30 November 1964, with Prestolite company officials for them to supply 3-brush permanent-magnet field windshield wiper motors (CAFC A-1091-093); on July 11, 1967 with Lake Center Switch to design and build prototype driver-actuated-controls for his IWWS which they would supply (CAFC A-1082); and, on October 6, 1967 with Essex Wire to supply IWWS wiring harnesses (CAFC A-1096).

With the agreement of these sub-contractors and Dr. Kearns' IWWS patents, Kearns *Engineers* was prepared to manufacture and supply IWWS sub-assemblies in volume to automobile-assemblers worldwide.

Transcript of the Proceedings before Judge Cohn
Friday, May 15, 1992 p. 2012:

THE COURT: I don't understand, candidly, a company that's got to worry about infringement, is very busy gearing up for production, where the patent lawyer [Mr. Santo] is still futzing around with his opinion because he can't find a file history. I think the jury ought to decide that.

Here's the company, the engineers, the production people and there going full speed ahead.

MR. CONLEY: Yes.

THE COURT: Getting ready to market this on their car belatedly, and the patent lawyer he's working on the infringement opinion.

Boy, I've got to tell you something. Either Santo would have lost his job, or a couple of engineers would have lost their jobs, if Santo came up with the conclusion that we infringe, you can't do it and you've got to start all over again.

Truth stimulated by
the CAFC Opinion

In reading the Petition for Writ of Certiorari, Dr. Kearns

learned the citation for the location of the *Kearns* v. *Chrysler Corp. and American Motors Corp.* Opinion of the Court of Appeals for the Federal Circuit ("CAFC") in the patent literature- 32 F.3d 1541 (Fed. Cir. 1994).

He was shocked to read the first phrase, "Owner of patents for intermittent windshield wipers ..." Is that what we have here before our countries highest court, responding to Chrysler's petition, an owner of patents? 'Owner of patents' connotes the one who purchased the rights - or more importantly - the one who satisfied the desires of the inventor. And since that person can operate only in the remedies of money, why then, 'money damages' would be adequate - wouldn't they? And if that were so - why would Dr. Kearns bother the justices of the highest court of our land?

But, while the person who appeared before the CAFC is the patent owner, he is - more importantly - the inventor. Let us focus on this inventor of IWWS. What drives him to carry these 'lawyer troubles' burdens for 32 years? Obviously, with every 'enlightened' automobile assembler in the western world in litigation with him - which the Justices must know is very expensive of pocketbook and mental health - he must have refused each one of the ever-mounting money offers of settlement. Even the Ford lawyers are pleased to report - this inventor refused a $35 million initial offer from Ford[4].

The thoughtful followers of the IWWS saga would acknowledge that Dr. Kearns has proven he has a great faith in the Judicial Branch of his country. The inventor's goal was to reduce the slaughter of his 'Biblical neighbors' occurring on our nations

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[4] He took $10 million through the Court - paid off his lawyers - and fired them for not seeking equitable relief and the public interest, ... - and Bob Kearns began to represent Dr. Kearns - exclusively, on 3 March 1992.

highways during wet weather[5]. Let's look at the status of the problem he solved with his inventions before reviewing the thrust of Chrysler's Petition.

Dr. Kearns' first patent, relative to this litigation before the Supreme Court is "Windshield Wiper System with Intermittent Operation" U.S. Patent, 3,351,836. Let's reproduce claim 4:

> In combination with a vehicle having a windshield, a windshield cleaning system comprising wiper blade means slidably engaging said windshield, motor actuated drive means for driving said wiper blade means through repeating wiping cycles, and automatic control means for activating said drive means to drive said wiper blade means through said repeating wiping cycles, said automatic control means including means for automatically varying the time between wiping cycles in response to the degree of dryness of the windshield.

Moisture responsive dwell time period? "Hey, I don't have that on my car" a Justice exclaims. To get all the surprises on the table, know the vehicle Dr. Kearns drives is not equipped with an IWWS! How can this be? Let's ask Dr. Kearns. His reply- "An IWWS is less safe in the rain," he responds, "beyond the accumulation of a threshold number of raindrops in the blade wiping area of the windshield, the drivers visibility is impaired by an IWW feature - not helped." Moreover, the drivers 'fiddling' with the dwell time adjustment is distracting to the driver's purpose - driving."

With the filing of his 3,483,459 U.S. patent on 7 March 1966, Dr. Kearns' inventions included an automatic proportional moisture responsive dwell period which he demonstrated to about 40 Ford executives[6] by means of water-mist sprayed from a window-cleaner-pump bottle:

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[5] More than half the deaths occur during wet weather when the weather doesn't provide rain half the time.

[6] they were wearing suits.

Dr. Kearns saturated the viewing area with water-mist and stepped back -

at the first passage into the wiper blade parking area of the windshield - the dwell was skipped completely;

at the end of the next wiping cycle, the blade dwelled for say, 2 seconds;

at the end of the next wiping cycle, the blade dwelled for say, 5 seconds;

at the end of the next wiping cycle, the blade dwelled for say, 9 seconds;

at the end of the next wiping cycle, the blade dwelled for say, 15 seconds.

One can see the rainbow of colors from the remaining mist change on the windshield with each wiper cycle.

Ford didn't put the electronic IWW feature that infringed six of Dr. Kearns' patents until the 1969 model - more than two years later. [110,000 deaths, by then]

During his deposition, one Ford engineer acknowledged that Dr. Kearns was on the (Ford) design team (for the '69 models).

Electronic IWW feature first appeared on the Ford 1969 model - but not moisture responsive dwell time IWWS. Why not? [There is no increase in the number of parts required - merely an adjustment of those parts already present. That means no additional cost of installation, as well.]

To answer the question, would trials really have been necessary if Ford and Chrysler had used the moisture responsive feature as well?

Certainly not.

And what is the thrust of Chrysler's Petition here?

Can't we copy each of the elements of an IWWS we can later find in the IWWS prior art - and seek the aid of the Justices of the Supreme Court to limit the remedy due Dr.

Kearns for Chrysler's infringement of four of Dr. Kearns' patents?

The remedy sought is in 1995, 28 years and 1,540,000 deaths on the U.S. highways after the 1969 models appeared!

Is Const. Art I § 8 Cl 8 to promote science and the useful arts or the copiers of patents who do more harm than good?

Moisture responsive dwell time = safety

Dr. Kearns' filed specification claims were based upon: synchronizing the operations of the IWWS with the position of the wiper blade on the windshield to achieve an intermittent dwell period in the 'park' position outside the vision of the driver with minimal circuitry that was independent of the engine; a continuously-variable continuous wiping feature that used the same driver rotary control for both setting the time period of the intermittent dwell in the INTERMITTENT driver-switch position and set the continuous speed of the wiper blade in the CONTINUOUS driver-switch position; and, as the number of raindrops *in the wiped viewing area* increased between each wiping stroke to a threshold number, the IWWS would automatically leave intermittent operation and operate in continuous speed.

This feature ensured the clearest visibility thereby increasing the publics' safety.

The following 14 U.S. patents granted to Dr. Kearns contain moisture sensitivity safety features:

U.S. Patent	Title
3,351,836	Windshield Wiper System with Intermittent Operation
3,483,459	Pulsed Windshield Wiper Control
3,500,159	Electronic Control for Windshield Wipers
3,529,227	Windshield Wiper Control
3,564,374	Intermittent Control Device
3,573,584	Motor Speed Control

U.S. Patent	Title
3,593,090	Intermittent Windshield Wiper System
3,721,115	Structure for and Method of Surface Condition Sensing and Indicating and Motor Speed Control
3,737,750	Motor Speed Control
3,876,919	Structure for and Method of Surface Condition Sensing and Indicating and Motor Speed Control
3,902,106	Intermittent Windshield Wiper Control Device
4,339,698	Control Apparatus for Windshield Wiper System
4,494,059	Structure for and Method of Surface Condition Sensing and Indicating and Motor Speed Control
4,544,870	Intermittent Windshield Wiper Control System with Improved Motor Speed Control

The Chrysler Corporation and American Motors Corporation trial was dependent upon the validity trial in *Kearns* v. *Ford Motor Company* as Chrysler management desiring to avoid the expense and trouble of a validity trial stipulated to be bound by the validity trial in *Ford*.

IWWS are Federally regulated

The windshield wiper system is Federally regulated safety item:

> Federal Highway Administration Motor Vehicle Safety Standard No. 104 Windshield Wiping and Washing Systems (CAFC A-950)

The Intermittent Windshield Wiper feature operating alone is inherently dangerous

Dr. Kearns believes the Intermittent Windshield Wiper feature assembled into Chrysler products is inherently dangerous (A-). Trico management appreciated the inherent danger of intermittent windshield wiper operation in wet weather too and provided an

answer in their patent.[7] When the accumulation increases in the windshield wiping area from a change from misty to wet weather conditions visibility is impaired.

In all the years of the Vietnam War there were not as many as 55,000 U.S. citizens killed, yet each year on U.S. roads 55,000 die in automobile accidents. More than half of those accidents occur in wet weather yet the weather is not wet half the time.

There have been 700 million inherently dangerous Intermittent Windshield Wiper features produced through infringement and added to the roads

Through the process of infringement by Chrysler Corporation of U.S. patents that also contained in their specifications solutions to such problems, nominally 30 million Chrysler products were placed on the roads. Through the process of infringement by Ford Motor Company of the same U.S. patents, nominally 60 million such Intermittent Windshield Wiper features were added to the roads. Through the alleged (confirmed by experts) process of infringement by General Motors Corporation of the same U.S. patents, nominally over 100 million such Intermittent Windshield Wiper features were added to the roads.

There are pending in the Federal courts, patent infringement cases concerning the same and other U.S. patents invented by Dr. Kearns that are only the same partial embodiments of the solutions invented and presented to the U.S. Patent Office to make our planet "a nice place to live (and not die prematurely)." The number of such Intermittent Windshield Wiper features placed on the roads of the western world by the members of said automobile assembly industry constitute 700 million vehicles.

Safety teachings by Reister Trico U.S. Patent 3,339,123:

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[7] See U.S. Patent 3,339,123. Inventor: William C. Riester assignor to Trico Products Corporation, Buffalo, N.Y.

Col. 1, beginning line 62:
Col. 3, beginning line 1:
Col. 4, beginning line 72:
Col. 5, beginning line 42:

Safety teachings by R. W. Kearns in his U.S. Patent 3,351,836:

Col. 1, lines 47 - 53:
Col. 1, lines 69 - Col. 2, line 4:
Col. 2, lines 4 - 34:
Col. 2, lines 58 - 69:
Col. 3, lines 24 - 27:

Safety teachings by R. W. Kearns in his U.S. Patent 3,351,836: (con't.)

Col. 3, lines 37 - 43:
Col. 5, lines 58 - 60:
Col. 5, lines 70 - Col. 6, line 2:
Col. 6, lines 58 - 62:
Col. 7, lines 21 - 30:
Col. 9, lines 44 - 52:
Col. 12, lines 32 - 38:
Col. 12, lines 49 - 51:

Safety teachings of R. W. Kearns in his U.S. Patent 3,564,374:

ABSTRACT OF THE DISCLOSURE
Col. 1, lines 18 - 20:
BACKGROUND OF THE INVENTION
Col. 2, lines 3 - 63:
Col. 6, lines 29 - 48:
Col. 7, lines 17 - 39:
Col. 10, lines 13 - 20:
Col. 13, lines 19 - 45:

Safety teachings of R. W. Kearns in his U.S. Patent 3,602,790

Col. 1, lines 51 - 54:

Col. 5, lines 29 - 61:
Col. 6, lines 8 - 10:
Col. 7, lines 17 - 33:
Col. 7, lines 54 - 63:
Col. 10, lines 26 - 36:
Col. 13, lines 42 - 52:
The detailed teachings are given at (A. 22-28).

The teachings from
Westinghouse Co. v. *Formica Co.*,
226 U.S. 342, 350 (1924)

> The analogy between estoppel in conveyance of land and estoppel of a patent right is clear. If one lawfully conveys to another a patented right to exclude the public from making, using and vending of an invention, fair dealing should prevent him (the inventor) from derogating the title he has assigned, just as it estops a grantor of a deed of land from impeaching the effect of his solemn act as against the grantee. The grantor purports to convey the right to exclude others, in the one instance from a defined tract of land, and in the other, from a described and limited field of the useful arts.

Since the inventor signed the oath and filed the application, the inventor retains the right to narrow the scope of claims to be negotiated by the grantee.

With regard to this Petition, Dr. Kearns remained the inventor throughout the benefit that Chrysler received and spent. Chrysler received the benefit of being relieved of validity-litigation expense and troubles. Dr. Kearns is estopped from causing Chrysler validity-litigation expense and troubles.

Dr. Kearns, as inventor and signer of the oath, retains the right to oppose the broadening of his patent claims beyond that of the state-of-the-art where he negotiated them.

Chrysler's right to seek a narrowing of the Kearns claims was transferred to Ford in exchange for the benefit of the relief from validity-litigation expense and troubles. Ford, in behalf of Chrysler as well as itself, failed to narrow the scope of Dr.

Kearns' claims in six patents. Chrysler is estopped under fair dealing from narrowing the claims of Dr. Kearns' six (U.S. patent) claims.

Others, independently receiving the right to narrow Dr. Kearns' claims of the six patents, may seek to do so, at their validity-litigation expense and troubles. But there is no analogy under *Westinghouse* v. *Formica* for Chrysler to do so as it has already received and spent its benefit from Dr. Kearns.

Dr. Kearns answer to

Chrysler's Question (1)

> (1) Does the trial court in a patent infringement case have "discretion" to exclude evidence of prior art, offered by the defendant to construe the scope of the claims at issue, contrary to this Court's express holding in *Westinghouse Co.* v. *Formica Co.*, 266 U.S. 342 (1924), that even where the alleged infringer is precluded from challenging a patent's validity, such prior art evidence must be used to construe and narrow the claims of the patent so as not to invade the public domain?

The question (1) is clever in that in a single sentence it confuses a number of legal principles and the application of *Westinghouse* to this case. Dr. Kearns first fact is that *Westinghouse* has no effect on

> "an estoppel arising where man has done some act which the policy of the law will not permit him to gainsay or deny." 51 S.E. 514, 521. ('fair dealing')

Dr. Kearns' second fact is, to quote Chief Justice Taft in his *Westinghouse* opinion, beginning p. 351, line 7:

> Such evidence (that of construing and narrowing the claims of a patent from the state of the art) might not be permissible in a case in which the assignor made specific representations as to the scope of the claims and their construction, inconsistent with the state of the art, on the faith of which the assignee purchased; but that would be a special instance of estoppel by conduct. We are dealing only with the estoppel of an assignment based on the specifications and

claims without special matter *in pais*.

Dr. Kearns' third fact is that in *Westinghouse* the defendant construing the scope of the claims at issue was the assignor who assigned an invention to the assignee before the claims were negotiated between the assignee with the Patent Office.

Dr. Kearns' fourth fact is that in *Westinghouse*, after the assignment was made, the patent claims were expanded through assignee-Patent Office negotiation *ex parte* from the assignor.

Dr. Kearns' fifth fact is that all would admit that the trial court has the authority to enforce a stipulation entered into by the parties in a patent case to which he has been assigned.

Dr. Kearns' sixth fact is that Ford infringed the Kearns '836 and '374 patents with the Ford circuit (A. 29) that has the same components interconnected in the same way to achieve the same result as the circuit found infringed by Chrysler.

Chrysler's alleged Supreme Court 'express holding' is excluded from application here by the exclusionary clause stated in the opinion of Chief Justice Taft cited as the second fact above. In an analogy to the facts supporting this Petition, Dr. Kearns 'purchased' that Chrysler would be bound by the validity trial in *Kearns* v. *Ford* with the lawful tender 'that Dr. Kearns would not cause Chrysler Corp. further validity-litigation expense and troubles.' Under the 'just dealings' required by the first fact above, Dr. Kearns is estopped from 'causing Chrysler Corp. further validity-litigation expense and troubles' while Chrysler is estopped from reneging on being bound by the Kearns-patent-invalidity defense conduct of the Ford Motor Company and the validity-trial result achieved by the Ford Motor Company in *Kearns* v. *Ford*. In short, Chrysler has spent its benefit from the stipulation relying on Ford's expense and troubles suffered in the Kearns-patent-invalidity trial of *Ford* while Dr. Kearns has already suffered the Kearns-patent-invalidity trial expense and troubles of *Ford*.

Facts three and four in *Westinghouse* result in the patent claims being expanded to Formica's detriment without Formica being heard. Here Dr. Kearns' patent claims remained the same from before the stipulation to the present date and were always well-known to Chrysler and Ford. Moreover, the prior art was shared among the Kearns infringement case defendants. The prior art cited by Chrysler in support of its Petition here on pp. 4 - 6 was well known to Chrysler and the other Kearns infringement case defendants from before the signing of the Chrysler-Kearns stipulation. While unnecessary under the legal principles argued here, being *pro se* and cautious, Dr. Kearns distinguishes his patent claims from the prior art cited by Chrysler on pp. 4 - 6, later in this Opposition to show again that Dr. Kearns' claims are outside the prior art in the public domain.

All the above having been said, Judge Cohn was justified in enforcing the Chrysler-Kearns stipulation in this case.

In the facts supporting this Petition, after the stipulation was made, the patent claims were not expanded but remained as issued by the Patent Office.

The numbered claim element clauses of Dr. Kearns' patents found 'not to have been shown invalid' in *Kearns* v. *Ford* are given at A. 30.

With 25 claim element clauses for the '836 patent;

20 claim element clauses for the '374 patent;

and, 11 claim element clauses for the '790 patent;

Dr. Kearns knows there is no need to detail the infringement for this Court as for that many claim element clauses to be applicable to Chrysler's (so-called) circuit - it has to be a copy of Kearns' technology. (A. 30-38)

Dr. Kearns' answer to
Chrysler's Question #2

(2) Does a trial court in a patent infringement case have any "discretion" to preclude the defendant from showing that the

accused device is identical to the prior art in every respect relevant to the application of the patent claims allegedly infringed?

Two restrictive phrases make this question #2 unique. The first phrase is 'any' discretion. The second restrictive phrase is "identical to the prior art in every respect relevant."

In formulating the question, Chrysler attorneys' should know:

> "every element of claimed invention must be disclosed in single prior art reference to establish anticipation which would invalidate patent." *Solarex Corp.* v. *Arco Solar, Inc.*, 805 F.Supp. 252 (D.Del. 1992)

In support of such a difficult chore, Chrysler merely eludes at:

page	line	company	date	mechanism
5	5	Trico Corp.	1950's	engine vacuum diaphragm time delay mechanism & adjustable bleed valve
5	12	General Motors	1960's	bimetallic strip heated electrically
5	23	Motorola	1960's	
5	23	Lucas Industries	1960's	
5	23	Bosch	1960's	
5	23	Trico	1960's	"resistor-capacitor-transistor dwell interval"
5	23	General Motors	1960's	"resistor-capacitor-transistor dwell interval"
5	29	Mellor patent to Lucas Industries	1960's	"high-speed and low-speed continuous operation with low-speed parking"
6	1	Gute patent to General Motors	1960	"high- and low-speed continuous and low-speed intermittent"

page	line	company	date	mechanism
6	4	Moller patent to Bosch	1964	"electronic intermittent timing circuit in a two-speed system"
6	7	Japanese utility	1965	"electronic intermittent control ler with a two-speed motor"

Chrysler states:

> 6 33 "The verdict thus invaded the public domain by subject ing Chrysler to damages for using what was plainly available in the prior art. There is no real dispute about this point. Neither the trial court nor the Federal Circuit expressed any doubt that Chrysler's accused system was identical to the prior art for all purposes relevant to the application of the claims."
> (Emphasis added. - Wow!)

Dr. Kearns answers that his '836 claim 16 comprises 25 claim element clauses (A. 30); his '374 claim 6 comprises 20 claim element clauses (A. 32); and his '790 claim 14 comprises 11 claim element clauses (A. 36). Applying *Solarex*, *supra* let's review Chrysler's claim "Chrysler's accused system was identical to the prior art."

Starting with the bottom and rising through Chrysler's list we find and limiting the answer to only that required and pertinent:

Chrysler's IWW feature utilized the three-brush permanent magnet field wiper motor of Dr. Kearns' '790 patent while the translation from the Japanese contains no reference to usage of such a three-brush permanent magnet field wiper motor[8]. Moreover, notice there is no wiper-motor-driven switch shown or referred to in the Japanese disclosure. Thus, the blades wipe for a period of time (multiple wipes?) and dwell for a period of time with the blade stopping anywhere and at a different location within the wiping area during each dwell period. (Dr. Kearns views this

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[8] The translation from Japanese to English (A. 39-44) was done by the lady who translates from Japanese to English at the U.S. Patent Office.

Japanese system as unsafe and its use would increase the 55,000 fatalities that occur on USA roads each year.)

Chrysler's IWW feature utilized the three-brush permanent magnet field wiper motor of Dr. Kearns' '790 patent while the Moller patent to Bosch contains no reference to usage of such a three-brush permanent magnet field wiper motor. The operation would appear erratic with a dwell period not occurring after each cycle on a dry glass, for example.

Chrysler's IWW feature utilized the three-brush permanent magnet field wiper motor of Dr. Kearns' '790 patent while the Gute patent to General Motors contains no reference to usage of such a three-brush permanent magnet field wiper motor. A bimetal element can not deliver the short dwell periods required for safe visibility during wetter windshield weather conditions.

Chrysler utilizes a WWS that is intermittent. The patent of Mellor to Lucas Industries is not an intermittent system.

Chrysler's reference to (A. 268-272) is the Gute system already discussed by Kearns.

Chrysler's reference to (A. 251-267) is the Oishei system to Trico. Ford abandoned the Trico systems in favor of the Kearns technology. The reason was that the Trico system utilized engine vacuum from the internal combustion engine that was thought would interfere with the exhaust emission controls mandated by the U.S. government while the Kearns technology is independent of the engine and is dependent only on the battery. Through infringement of Dr. Kearns' technology, Ford was able to more completely integrate Ford's manufacturing operations by eliminating an outside-Ford supplier of windshield wiper controls and subsystems. Equitable relief to Dr. Kearns by this Court can still eliminate Ford's monopolistic advantage.

There is no further prior art for Dr. Kearns to answer. The New Yorker's *Annals of Invention: Windshield-wiper wars* "The Flash of Genius" at p. 44 of the January 11, 1993 issue concludes,

"Kearns' intermittent wiper was an elegant piece of engineering." (There must be some reason Dr. Kearns' technology is offered through infringement by every automobile assembler in the western world.)

Chrysler's claims to this Court "that the accused device is identical to the prior art in every respect relevant to the application of the patent claims" are simply not cogent.

Dr. Kearns' answer to
Chrysler's Question #3

> (3) Does Article 1, § 8, of the United States Constitution preclude the trial court in a patent case from permitting the jury to find infringement by construing a patent claim so broadly as to cover what is in the public domain?

In this *Kearns* v. *Chrysler Corp. and American Motors Corp.* patent case it has been shown *infra* that the prior art cited by Chrysler in its Petition does not permit Chrysler's infringement of Dr. Kearns' technology. Dr. Kearns believes that Chrysler's failure to include the moisture variable dwell time inventions of Dr. Kearns in its infringements contributes to an increase in automobile accidents on USA roads during wet-weather conditions. Chrysler's third question is not necessarily reached here.

* * *

35 U.S.C. § 283 injunction
for peace and trade

While the title of this response to Chrysler's Petition for a Writ of Certiorari is imposed upon the litigants as **Brief in Opposition**, Dr. Kearns would like to go on record in this response that he is not opposing the goals of the Chrysler Corporation: to market the 'best' automobile in the world; to market the 'safest' automobile in the world; and to market the 'classiest' cars, in the various age groups, in the world, and, all this at a profit to Chrysler Corporation shareholders and Kearns *Engineers* participants. In short, Kearns *Engineers* views Chrysler as their customer. Hopefully, Chrysler views Kearns *Engineers* as a

(potential) supplier having talent, patents and capabilities desirable to Chrysler Corporation stockholders.

Why would Chrysler management resort to having a young, inexperienced engineer, Mr. Orris, 'copy' Dr. Kearns' technology 19 days after a meeting with Chrysler's patent attorney, Mr. Santo, that occurred two months after Chrysler's production had started? Is the legal process helpful or harmful? To leave the safety features off the infringed invention for fear of making the inventor's case - seems counterproductive to Dr. Kearns. Can't our country field one team? Are we to destroy ourselves internally under the GATT treaty? Doesn't this Court have a role to play in promulgating the new rules?

Since the Chrysler infringement process failed to include the safety features that solve the inherent safety problems of IWWS, would Chrysler oppose having this Court return the 'limited times' consumed in the judicial process to Dr. Kearns in a § 283 injunction against Chrysler so that he would be enabled to supply such 'safe' IWWS to Chrysler products? Would the driving public oppose such as injunction? Would the U.S. Trade Representative oppose such an injunction?

Should this Court's Justices allow this opportunity to pass and the infringement result to stand (without including the safety features specified within the patents on Chrysler's products) would the Justices share in the responsibility for some of the continuing wet-weather accident deaths occurring on U.S. highways?

These are new times. These are times to be dominated by peace between nations. Competition between nations is to be expressed through trade. Not by trade directed toward obtaining an advantage over a competitor nation, but more in seeking to make this planet a nice place to live with each nation competing to contribute the 'most' to that goal through providing products and services at minimum 'cost' to all. These are the times of the General Agreement on Tariffs and Trade ("GATT") and the World Trade Organization ("WTO"). These are the times of adapting our

national laws to the deterrence of infringement of intellectual property rights while enlightened participating nations gain the improvements in their citizens' standard-of-living.

Does the Constitutional admonition to provide for the general Welfare and the promotion of science and the useful arts arising under the Constitution provide jurisdiction to enable the Justices of this Supreme Court to cite the civilized rule applicable to adjudged infringers who have reduced the wet-weather driving safety of their customers through the process of unlawfully acquiring and selling products based on unexpired IWWS patented art without utilizing as well, the moisture responsive dwell time solution to the inherent intermittent wiping wet-weather driving-safety problem solved in the same patents unlawfully acquired?

Petitioner has been adjudged the infringer of three of Dr. Kearns' patents which patent specifications contained solutions to the inherent safety problems for the use of intermittent windshield wiper systems on automobiles in wetter than misty weather. The patents were infringed by Chrysler without the infringement of the claims applicable to the solutions for the inherent safety problems. However else this practice may be described, such partial infringement plainly proffers causes of action by those suffering such accidents in wetter weather. The problem of partial infringement of U.S. patents containing safety features for their proper use is a problem worthy of this Court's rule making wisdom.

* * *

Civil actions for a remedy
to the inventor **and** the public
arise under the U.S. Constitution

That so many 'ticking' accidents are out there on the roads via publications arising out of Const. Art I § 8 Cl 8 is a perverse result from Dr. Kearns' 31 years of lawyer expense and troubles.

The unusual profits went to whom?

The automobile assemblers of the western world are in U.S. Federal Courts for the taking of partial solutions from the patent specifications that constitute full infringement of some of the patent claims of the same said U.S. patents. The partial-solutions appropriated into their "protected market" model-segment capture the inventor's "opportunity for **unusual profit** necessary to justify the heavy investment in time, effort, and capital necessary to bring the improvement to the public". Court records show Ford made an 80% profit on Intermittent Windshield Wiper receipts while Chrysler made an 82% profit on Intermittent Windshield Wiper receipts. (A. 45)

The competition drove the distribution of the external feature of the art while the part of the patent art specification offering 'best-mode' improved-safety in the use of the feature was ignored by the infringers.

The public is left with the traffic deaths and need for a remedy through the patentee[9].

§ 281 proffers a remedy only to the inventor but the following cases cite that the public interest is dominant or of equal importance with the inventor's interest.

> "[I]t is not the private use but ... the public interest which is dominant in the patent system[10]." *Mercoid Corp.* v. *Mid-Continent Co.*, 320 U.S. 661, 665.

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[9] Title 35 U.S. Code
§ 281. Remedy for infringement of patent
"A patentee shall have remedy by civil action for infringement of his patent."

[10] *Pennock* v. *Dialogue*, 2 Pet. 1; *Kendall* v. *Winsor*, 21 How. 322, 329; *Adams* v. *Burke*, 17 Wall. 453; *Motion-Picture Co.* v. *Universal Film Co.* 243 U.S. pp. 510-511; *Morton Salt Co.* v. *G.S. Suppiger Co.*, 314 U.S. 488, 493; *United States* v. *Masonite Corp.*, 316 U.S. 265, 278 ... The patent is a privilege. But it is a privilege which is conditioned by a public purpose ..."

Dawson Chem. Co. v. *Rohm and Haas Co.*, 448 U.S. 176, 221 (1980), reflects a shift towards recognition that the patent holder's rights and the public interest should be accorded equal weight in deciding patent cases.

The only remedy the patent law provides against infringement is to the patentee under §281. The patentee can only receive **§283 Injunction** relief and **§284 Damages** relief. **§284 Damage** relief is money to the inventor. Neglecting taxes, that money to the inventor does not return to the USA public its interest in the USA invented-product.

Where the invented-product is infringed and sold in high volume in a market segment controlled by the infringer within the worldwide market, the only place left for the public to gain its rightful interest from the invented-product under 35 U.S.C. is through a **§283 Injunction** remedy to the inventor.

Thus far in his civil action remedy trials, Dr. Kearns has completed two trials. Since § 283 is discretionary, in the first instance with the District Court, Dr. Kearns has been denied in both instances, a hearing at which he would present evidence supporting his right (and that of the public) to a § 283 injunction.

This perverse tragedy was not foreseen by the Founding Fathers

This perverse result from promoting the "useful arts" was not foreseen by the Founding Fathers.

Kearns *Engineers* (honestly) supplying through export the patented (worldwide) Intermittent Windshield Wiper Systems market via sub-assemblies would make a difference of +4.8% in USA exports.(A. 46)

CONCLUSION

Since Dr. Kearns has been denied § 283 relief in both the *Ford* and *Chrysler* trials and by the panel in the CAFC, there remains only this Supreme Court to intervene and attain the public interest.

APPENDIX

BEST AVAILABLE COPY

Kearns Design
Chrysler Design

DD/Aコンバータ
MODEL 840

新製品

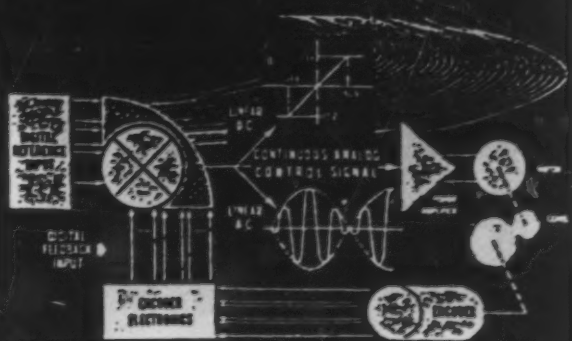
デジタル量の差を
アナログ量に
変換する装置

■超高精度

$\frac{1}{12億}$ %

■変換時間

2μsec.



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LIST OF CASES

Cases in the U.S. District Court for the Eastern District of Michigan Southern Division:

LITIGANT	CIVIL NO.
Kearns v. *Wood Motors, Inc.* *Daimler-Benz Akatiengesellschaft, and* *Dr. Ing. h.c.f. Porsche A.G.*	78-70642
Kearns v. *Ford Motor Company*	78-70740
SWF - Specialfabrik fur Autozebehor v. *Kearns* *Gustav Rau G.m.b.H.*, a corporation of the Federal Republic of Germany	79-74451
Kearns v. *Fred Lavery Porsche,* *Wood Motors, Inc.,* *Volkswagen Werks A.G., Wolfsburg, and* *Ausi NSU Union, A.G.*	82-70749
Kearns v. *Ferrari S.p.A.,* *AB-Volvo,* *Alfa Romeo, S.p.A.,* *Automobiles-Citroen, S.A.,* *Bayerische Motoren Werks, A.G.,* *B-L PLC (British Leland),* *Fuji Heavy Industries, Ltd.,* *Group Lotus Cars Co.,* *Honda Motor Co.,* *Isuzu Motor Co., Ltd.,* *Mitsubishi Motors Corp.,* *Nissan Motor Co., Ltd.,* *Officiene Alfiere Maserati,* *Peugeot, S.A.,* *Regie Nationale Renault,* *Rolls Royce Motors, Ltd.,* *Saab-Scania AB,* *Toyo Kogyo Co., Ltd.* (Mazda), *Toyota Motor Co., Ltd.,*	85-70459

LITIGANT	CIVIL NO.
Dealers in the Detroit area: *Barnett Pontiac-Datsun, Inc.*, *Bavarian Motor Village, Ltd.*, *Dagliesh Cadillac-Peugeot*, *Joe Dwyer Subaru Volvo, Inc.*, *Falvey of Troy*, *Grosse Pointe AMC-Jeep Renault*, *La Fontaine Toyota*, *Seaway Motors Inc.*, *Sports Car Exchange, Inc.*, *Tamaroff Buick-DMC-Honda-Rolls Royce*, *and Wood Motors, Inc.*	
Kearns v. *General Motors Corp.*	85-70461
Kearns v. *United Technologies Corp.* & *United Technologies Automotive, Inc.*	92-71408
Other cases:	
Kearns v. *United States*	U.S. Claims 436-84C
Kearns v. *United States*	U.S. Court of Appeals for the Federal Circuit 84-1849
Kearns v. *United States*	U.S. Supreme 85-645
Kearns v. *Fred Lavery Porsche Audi Co.*, *Wood Motors, Inc.*, *Volkswagenwerk, A.G.*, and, *Audi NSU Auto Union, A.G.*	U.S. Court of Appeals for the Federal Circuit 84-655

LITIGANT	CIVIL NO.
Kearns v. *Ford Motor Company, Wood Motors, Inc., Robert Bosch Corp., Daimler-Benz Aktiengesellschaft, Porsche, A.G., SWF-Specialfabrik fur Autozebehor Gustav Rau, G.m.b.H.*	U.S. Court of Appeals for the Federal Circuit 87-1356
Kearns v. *Chrysler Corp.* and *American Motors Corp.*	U.S. Court of Appeals for the Federal Circuit 92-1531

RECEIVED JAN 11 1980
WHITTEMORE, HULBERT & BELKNAP

UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF MICHIGAN
SOUTHERN DIVISION

ROBERT W. KEARNS,

Plaintiff,

v. CIVIL ACTION
NO. 78-70642

WOOD MOTORS, INC.
DAIMLER-BENZ AKTIENGESELLSCHAFT
and DR. ING. h.c.f. PORSCHE A.G.,

Defendants.,

MEMORANDUM OPINION AND ORDER
REGARDING PLAINTIFF'S MOTION
FOR A PRELIMINARY INJUNCTION

Plaintiff Dr. Robert Kearns is the owner of seven United States patents dealing with transistorized windshield wiper control systems. Kearns brought this action against three defendants for patent infringement in violation of 35 U.S.C. §271 (a) and 271 (b). This suit was begun on March 21, 1978, over 17 months later, plaintiff filed the instant Motion for a Preliminary Injunction. In this motion plaintiff requests that the defendants and their officers and agents be enjoined from infringing one of the seven patents.[1]

The parties have submitted extensive briefs on the propriety of a preliminary injunction in this case and have argued their positions orally. The primary point of contention between the parties concerns the standards which must guide the Court in considering a request for preliminary relief in a patent case. It is

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[1] The patent at issue in this motion is U.S. Patent No. 3,564,374 an intermittent control device. Dr. Kearns originally applied for this patent on December 1, 1964 and the patent has a date of issue of February 16, 1974.

this threshold question that the court must first turn.

Plaintiff has argued in its various submissions that the factors which govern the Court's exercise of discretion in every other preliminary injunction request are also fully applicable in patent litigation. Defendants on the other hand suggest that plaintiff in such motions faces a far stricter standard than that which obtains in the ordinary case.

To a certain extend plaintiff has correctly stated the law. As in other cases, the Court, in deciding such a motion, is required to weight four factors: plaintiff's probability of success on the merits; the irreparable injury suffered by plaintiff as a result of defendants' actions; the balancing of harm to the plaintiff if such relief is granted relative to the harm suffered by defendants if a preliminary injunction issues; and the public interest in granting or denying the injunction. However, in giving substance to these generalities, federal courts have attached various rules in patent cases which operate to make plaintiff's burden substantially greater.

This stricter standard is particularly apparent in examining plaintiff's probability of ultimate success. To establish this element plaintiff must prove his title to the patent, the patent's validity, and infringement on the part of defendant. But while in the ordinary preliminary injunction request plaintiff would have to prove these elements sufficiently to establish a strong or substantial likelihood of success on the merits, *see e.g., Mason County Medical Assn.* v. *Kneel*, 569 F.d 256 (6th Cir. 1977), this standard is not applicable in patent cases. Instead, the widely accepted rule is that entry of an injunction in patent litigation requires that title, validity, and infringement be established "beyond question" or "beyond a reasonable doubt". *See Mayview Corp.* v. *Rodstein*, 480 F.2d 714 (9th Cir. 1973); *Eli Lilly and Company, Inc.* v. *Generix Drug Sales, Inc.*, 460 F.2d 1096 (5th Cir. 1972); *Carter-Wallace, Inc.* v. *Davis-Edwards Pharmaceutical Corp.*, 443 F.2d 867 (2d Cir. 1971), *cert den.* 412 U.S. 929 (1973); *Leavitt* v. *McBee*, 124 F.2d 938 (1st Cir. 1942); 8 *Walker*

on Patents § 686 (Deller 2nd Ed., 1973.).[2]

Federal courts have recognized that validity and infringement can be established beyond question if there has been a prior adjudication of the patent in question or if there has bveen public acquiescence in the patent. Defendants have argues here that proof of either of these two elements is a prerequisite to injunctive relief in any patent case. It is therefore argues that because there has been no prior adjucication of the patent or prior acquiescence this motion must be denied.

The Court agrees that plaintiff cannot claim either of the two exceptions,[3] but the Court is unable to acdept the argument that proof of acquiescence or prior adjudication is a necessary precondition to the granting of prelimminary relief. The federal courts appear to have reached contradictory conclusions on this subject,

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[2] It has been suggested that the Sixth Circuit does not require such a high standard of proof. See Dorr and Duft "Patent Preliminary Injunction Relief" 60 J.Pat.Off.Soc. 597, 632 fn. 7 (hereinafter Dorr & Duft). The authors of that article reach that conclusion based on indications gleaned from the text of *City of Grand Rapids* v. *Warren Bros., Inc.*, 196 F. 892 (6th Cir. 1912), *Crescent Specialty Co.* v. *National Fireworks Dist. Co.*, 219 F. 130 (6th Cir. 1915) and Blount v. Societe' Anonyme Du Filtre, 53 F. 98 (1892). This conclusion is open to question in light of the near unanimity in the other federal courts favoring the stricter standard in cases for more recent than these three Sixth Circuit cases. See Dorr & Duft, *supra* at 632. Furthermore, drawing a firm conclusion from these cases is difficult because of an apparent inconsistency between the three holdings. The two earliest cases, *Blunt* and *City of Grand Rapids* may indeed be read as incorporating traditional preliminary injunction standards into patent litigation. The third case however casts some doubt on this reading. In *Crescent Specialty*, the Court stated that a preliminary injunction could be ordered where title was clear, plaintiff demonstrates a fair probability that the patents are valid, and "there is sufficient showing of public acquiescence therein", *id.* at 132. This seemingly mandatory proof of public acquiescence is surely not consistent with the Sixth Circuit's earlier rulings that traditional equitable principles would govern patent cases.

[3] Plaintiff has asserted that the officers of Daimler-Benz and Porsche made offers to settle this case shortly after the suit was filed. Plaintiff contends that this demonstrates that these defendants impliedly acknowledged these patents to be valid. The settlement offers are of little or no value in proving that defendants conceded validity or infringement, for they merely reinforce the position defendants have taken throughout this litigation, i.e., the costs of 2defending this suit exceed and possible liability for infringement they may have.

but in this Court's view the better rule of law is contained in the Fifth Circuit's decision in *Eli Lilly* v. *Generix Drug Sales, supra,* where the court held that plaintiff's burden of establishing validity and infringement beyond question "is ameliorated where the patent at issue has been the subject of long acquiescence or has been adjudicated to be valid". *Id.* at 1099. Thus while acquiescence or prior adjudication are not prerequisites to a preliminary injunction, absent proof of one of these elements; plaintiff has the difficult task of demonstrating validity and infringement beyond question by other evidence. Since plaintiff has presented no evidence of prior adjudication or acquiescence, it is this high standard which controls the Courts consideration of the motion for preliminary injunction.

In this memoranda in opposition to the plaintiff's motion defendants have argued that plaintiff is unable to prove validity or infringement beyond a reasonable doubt for any number of reasons. Of principal concern to the Court is the claim that the patent at issue here is invalid under 35 U.S.C. § 102(b) since it was "on sale" more than one year before the December 1, 1964 application filing date. Section 102 (b) of Title 35 provides that a person may be entitled to a patent unless:

> "the invention was ... on sale in this country more than one year prior to the last date of application for patent in the United States."

Defendants have asserted that one year before his application, dr. Kearns demonstrated a working model of his system to several employees and agents of the Ford Motor Company. Defendants have also submitted affidavits signed by Dr. Kearns and testimony given by Kearns in prior litigation which, in defendants' view, imply that these demonstrations were intended as a solicitation for the sale of the invention.

Plaintiff on the other hand has suggested that the demonstration of the patent before the Ford employees was designed for personal informational purposes only. It is claimed that the intermittent windshield wiper control system was not operational at this time, particularly in light of the fact that the system when house in the

automobile would have to withstand temperatures which might adversely affect the operation of the system which was demonstrated to the Ford engineers.

The Court has reviewed carefully the submissions of counsel on this issue and it must conclude that defendants have raised a reasonable doubt as to the validity of the patent under 35 U.S.C. § 102(b). A logical inference which can be drawn from statements made by plaintiff himself in prior testimony and affidavits is that he was most interested in becoming the Ford supplier for such wiper systems and that this was his direct goal in conducting the demonstration. It further appears from Dr. Kearns' testimony that the system was at the time of the demonstration in a marketable state.

It is neither necessary or prudent for the Court to go into great depth into the relative merits of the parties' position or the question of § 102(b)'s application. The ultimate disposition of this question of validity of the Kearns' patent must be left to a later time. But, in the present procedural context the Court is only concerned with whether plaintiff has established the validity of his patent beyond question. The Court must conclude that he has not.

Regardless of its conclusion on the merits of plaintiff's claim, the Court would be constrained go deny the instant motion because of plaintiff's failure to establish irreparable injury. As noted by the Supreme Court in *Sampson* v. *Murray*, 415 U.S. 61 (1974), "[t]he basis of injunctive relief in the federal courts has always been irreparable harm and inadequacy of legal remedies." *Id.* at 88.

Plaintiff has claimed several examples of irreparable harm which would result if a preliminary injunction is not issued. Plaintiff's primary argument is premised on his contention that, except for the defendants' infringement of his patents, plaintiff would be the major manufacturer and supplier of these systems. He has therefore argued that this status is being denied him while defendants continue infringing his patents. Plaintiff further claims that he may be forever denied a foothold in the market as a supplier of these goods since the patent at issue here expires in four years.

The Court notes that plaintiff's inability to become a supplier of defendants' allegedly unlawful use of plaintiff's patent does not establish irreparable harm. Such claims for lost profits if proved with sufficient definition at trial, could be the basis for a damage award which would fully recompense plaintiff for the violations. *See Panduit Corp.* v. *Stahlin Bros. Fibre Works*, 575 F.2d 1152 (6th Cir. 1978); *H.K. Porter Co., Inc.* v. *Goodyear Tire & Rubber Co.*, 536 F.2d 1115 (6th Cir. 1976).

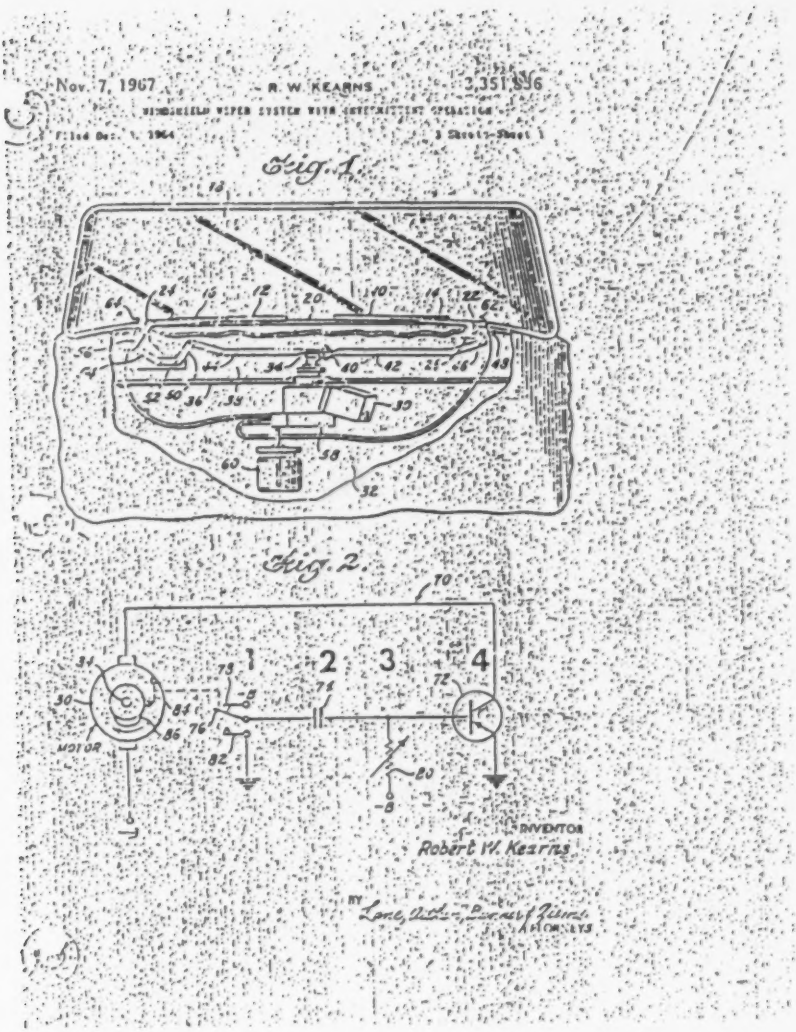
It is true that if plaintiff's patent were to expire prior to a decision finding the patent valid and infringed, the plaintiff's anticipated position as a major supplier of the windshield wiper systems would be under mined. The short answer to this contention is that this action will be completed before the expiration date of plaintiff's patent. The Court would therefore be able to enjoin the infringement of this patent if plaintiff is successful on the merits and plaintiff would be allowed the marketing foothold which he fears would otherwise be lost.

Pursuant to the foregoing, the Court will deny plaintiff's Motion for a Preliminary Injunction.

IT IS SO ORDERED.

/s/ Philip Pratt
PHILIP PRATT
United States District Judge

Dated: January 10, 1980
Detroit, Michigan


Nov. 7, 1967
R. W. KEARNS
3,351,836
Fig. 1.
Fig. 2.
MOTOR
INVENTOR
Robert W. Kearns

CONTROL AND INSTRUMENTATION

20524 RUTHERFORD AVENUE
NEAR EIGHT MILE & LODGE FREEWAY
DETROIT, MICHIGAN 48235
313 - 837-5515

PROPOSED CHRYSLER CIRCUITS

with

PATENTABLE FEATURES REPORT

Submitted to

Tann Controls Company

May 7, 1968

P 03979

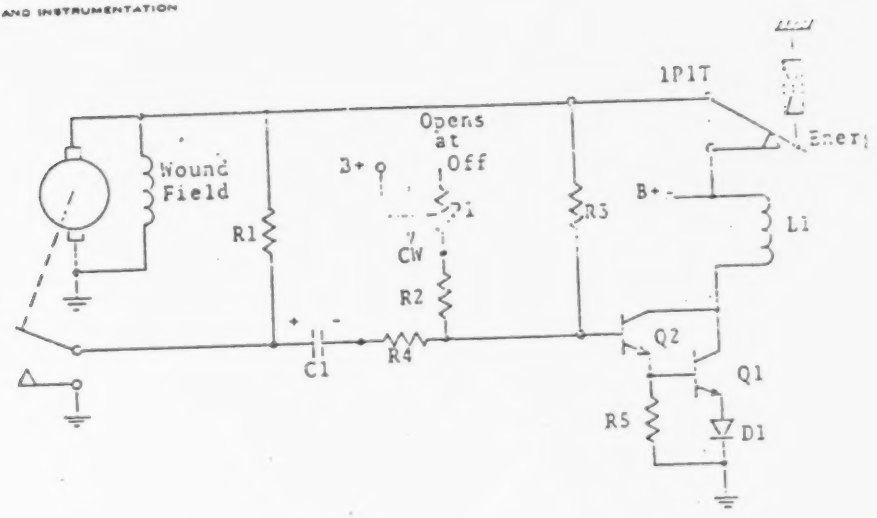
Submitted by:

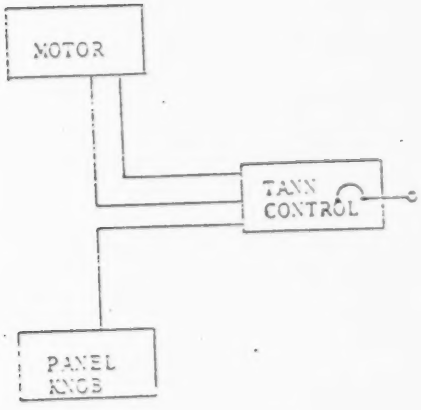
Robert W. Kearns, Ph.D.
Professional Engineer

CONFIDENTIAL

154 SUBJECT TO PROTECTIVE ORDER

A. 13





Price List

C1	11¢
D1	5¢
R1-R5	10¢
1P1T	35¢
Q1	9¢
Q2	9¢

Prt. Ckt. 13¢
Labor 13 min
Mount in Relay 92

FIGURE I-1

CONTINUOUS-TO-INTERMITTENT RELAY SYSTEM
WOUND FIELD MOTOR

P 039799

Inter Company Correspondence 7/69

File Code Date 6/27/75

	Division	Post Office	Code Number
C.E. THOMPSON	5727		
M.B. GRIFFIN	5727		

Subject EVALUATION OF INTERMITTENT WIPER CONTROL CIRCUITS

CENTRAL ENGINEERING'S PROPOSED INTERMITTENT WIPER CONTROL CIRCUITS "A" AND "B" HAVE BEEN BUILT AND EVALUATED. TESTS INCLUDED POSITIVE AND NEGATIVE TRANSIENTS AS WELL AS SUPPLY REVERSAL. ALL TESTING WAS DONE AT 25°C AMBIENT TEMPERATURE. THE FOLLOWING PROBLEMS WERE NOTED:

1. CIRCUITS WILL NOT SURVIVE -300 VOLT TRANSIENTS. (FAIL AFTER ONE PULSE)

2. THE SMALL SIGNAL NPN TRANSISTOR IN THE TIMING CIRCUIT IS SUBJECTED TO HIGH BASE CURRENT PULSES. (1.5 AMPS PEAK HAS BEEN MEASURED)

3. RELAY CLOSURE DURING POWER UP IS PROBABLY NOT LONG ENOUGH TO GUARANTEE MOTOR STARTING AND DWELL SWITCH ACTUATION. (RELAY CLOSURE IS ABOUT 60 MILLISECONDS)

4. NEITHER CIRCUIT CAN WITHSTAND SUPPLY REVERSAL.

5. SMALL POSITIVE TRANSIENTS OF 2 TO 5 VOLTS DURING DELAY INTERVAL CAUSE FALSE START UP.

DEFENDANT'S EXHIBIT 201

ICC
6/27/75

370

6. BOTH TRANSISTORS COMMON TO "A" AND "B" MUST BE HIGH GAIN PARTS. THE PNP'S MINIMUM GAIN IS ABOUT 100 WHILE THE NPN'S MUST BE GREATER THAN 500.

C.C. J.L. WEBSTER

United States Patent

[11] 3,581,178

[72] Inventor: Robert W. Kearns
20524 Rutherford, Detroit, Mich. 48235

[21] Appl. No. 815,060
[22] Filed Apr. 10, 1969
[45] Patented May 25, 1971

[54] WINDSHIELD WIPER CONTROL DEVICE
10 Claims, 4 Drawing Figs.

[52] U.S. Cl. 318/443
[51] Int. Cl. B60s 1/08
[50] Field of Search 318/443
(WW); 15/250.12, 250.02, 250.2

[56] References Cited
UNITED STATES PATENTS

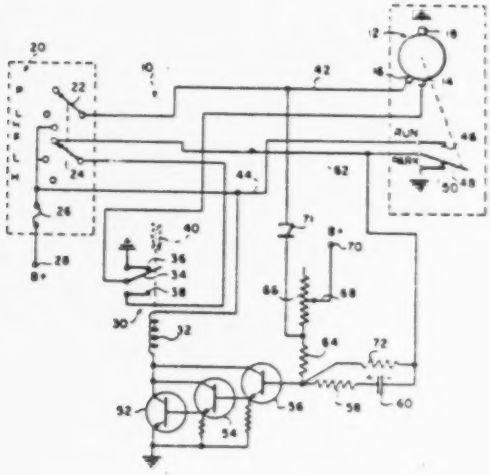
3,333,174	7/1967	Moller et al.	318/443
3,339,123	8/1967	Riessner	318/443

FOREIGN PATENTS

1,093,430	11/1954	France	318/339
1,285,849	1/1962	France	318/443

Primary Examiner—Oris L. Rader
Assistant Examiner—Robert J. Hickey
Attorney—Lane, Aitken, Dunner & Ziems

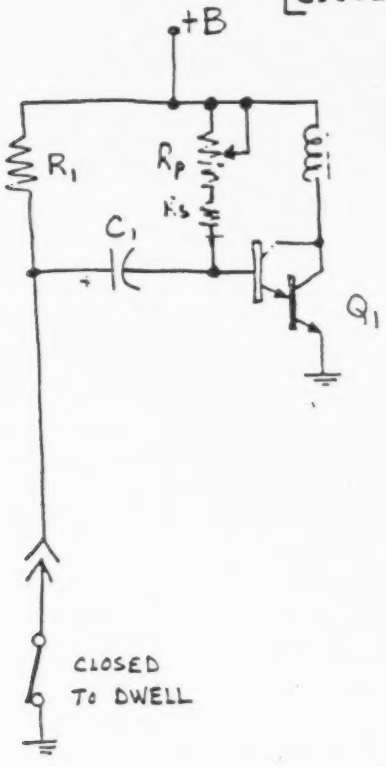
ABSTRACT: An electric control device controlling a wiper motor to operate windshield wiper blades intermittently with a dwell period between successive wiping cycles. The wiper motor current is carried by relay contacts and a solid state timing circuit controls the energization of the relay coil.



A. 17

INTERMITTENT WIPER CONCEPT 7-29-75

[CLOSED TO DWELL]

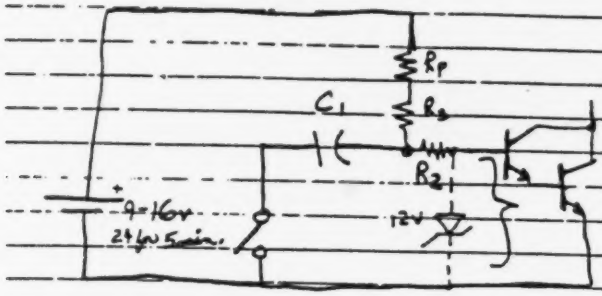


PLAINTIFF'S EXHIBIT 269

85

INTERMITTENT WIPER CONCEPT cont. 7-29-75

CASE I : Discharge C_1 thru dwell switch, battery and $R_p + R_s$

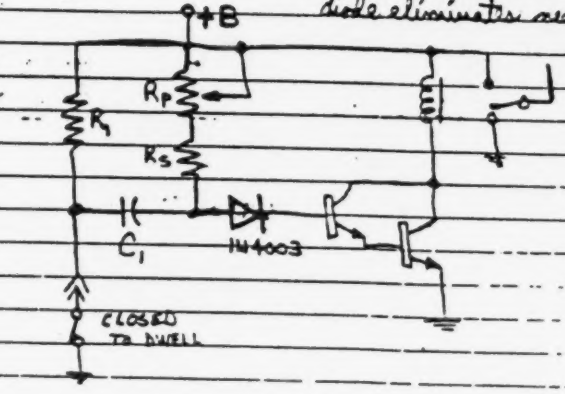


Max charge on C_1 = 24 VOLTS (WORST CASE) TRANSIENT COND.

In order to protect Q_1 → effectively a 12v zener in reverse condition R_2 is added to limit load current

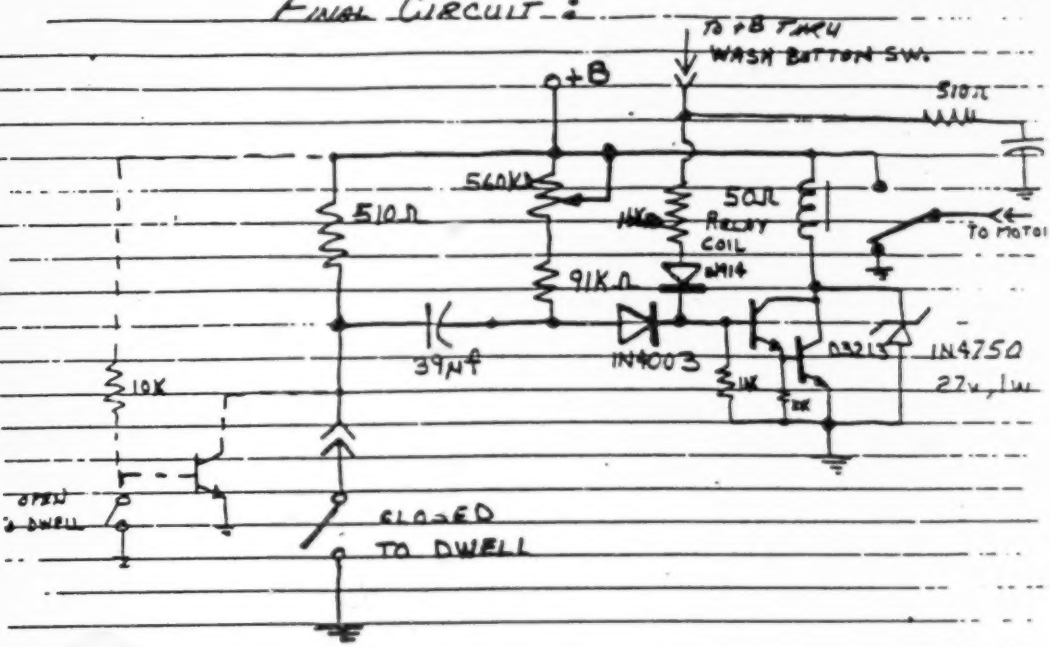
CASE II : DISCHARGE C_1 ⇒ TRANSISTOR will effect delay time if voltage is greater than 12 VOLTS

SOLUTION : ~~ADD~~ HIGH VOLTAGE ~~BREAK~~ DOWN DIODE diode eliminates need for R_2

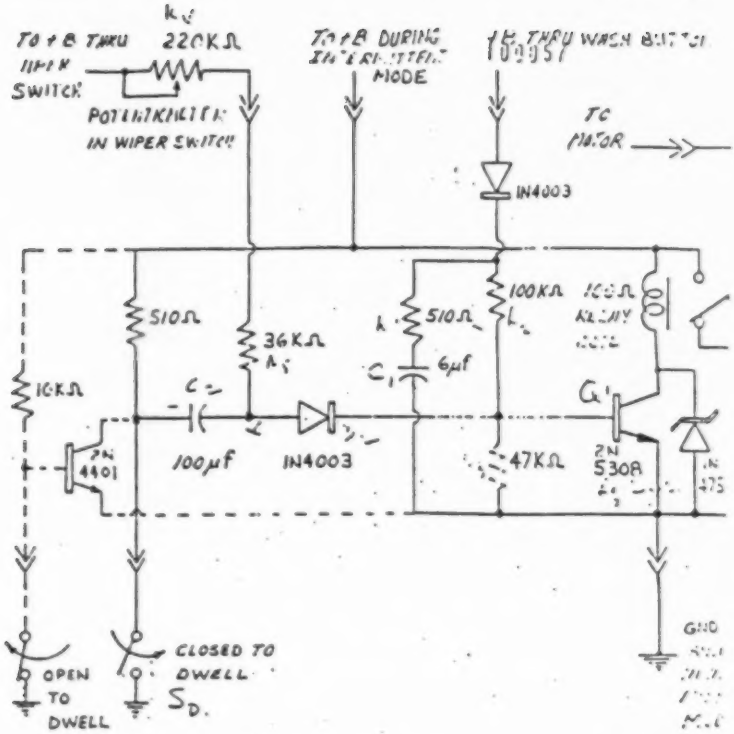


86

FINAL CIRCUIT :



91



INTERMITTENT WIPE CONTROLLER I

Symbiosis Plus
Steubenville, Ohio
8-11-75

8-11-75

A. 21

Safety teachings by R. W. Kearns
in his U.S. Patent 3,351,836

Col. 1, lines 47 - 53:

However, when the water on the windshield increases due to increased rain, or wheel spray from a vehicle which is being passed, it is very desirable to sense this change in condition of the windshield, automatically switch the wiper system to continuous operation whole this condition prevails and automatically switch back to intermittent operation when the condition no longer prevails.

Col. 1 lines 69 - Col. 2 line 4:

The present invention provides an intermittent windshield wiper system which is truly responsive to the condition of the windshield by utilizing the drag encountered by the wiper blade moving over the windshield to determine whether the wiper blades are stopped for a dwell period at the end of each cycle or whether the dwell period is skipped to provide continuous operation.

Col. 2 lines 4 - 34:

In accordance with one embodiment of the invention involving an electric windshield wiper system for automotive vehicles, the electric motor is deenergized at a predetermined point near the end of each wiping cycle to initiate a deceleration period during which the motor continues to rotate through a small angle due to the momentum of the system. During the decelerating period, the drag encountered by the wiper blades moving over the windshield exerts braking force on the motor which varies with the condition of the windshield. When the wiper blades are operating over a set windshield, such as during a heavy rainfall, they are well lubricated and the braking force is very small. When the braking force is significantly greater and decelerates the windshield wiping system faster during the decelerating period so as to bring the motor to a complete stop in a few number of degrees as compared to a wet windshield. By selecting a number of degrees (theta) between these two position and automatically re-energizing the motor after (theta) degrees, an effective degree-of-dryness control

is achieved. When the windshield is very wet, the motor is re-energized to start another wiping cycle before the windshield wipers come to a complete stop during the decelerating period. This skips the dwell period and provides continuous operation. When the windshield is wet-dry or dry, the windshield wipers come to a compete stop during the decelerating period before the rotor rotates through (theta) degrees. This starts a dwell period and suitable means is provided for energizing the motor at the end of the dwell period to start another cycle of operation.

Col. 2 lines 58 - 69:

The transistor is shut OFF when the motor is deenergized near the end of each wiping cycle and automatically turned back ON by an RC time constant circuit to re-energize the motor after a predetermined dwell period if the system stops for a dwell period in response to the condition of the windshield. If the condition of the windshield dictates that the dwell period be skipped by re-energizing the motor before the system comes to a compete stop as described above, the transistor is automatically turned back ON after (theta) degrees of rotation to re-energize the motor and start the next cycle.

Col. 3 lines 24 - 27:

It is another object of the invention to provide a windshield wiper control system for automatically operating windshield wipers intermittently or continuously in response to the degree-of-dryness of the windshield.

Col. 3 lines 37 - 43:

It is a still further object of the invention to provide a windshield wiper control system wherein the wiper motor is deactivated for (theta) degrees near the end of each wiping cycle and the drag encountered by the wipers on the windshield determines whether the wipers stop at the end of a cycle for a dwell period or continue into the next wiping cycle.

Col. 5 lines 58 - 60:

In the event a heavier rainfall is encountered, or water is sprayed

on the windshield from a vehicle being passed, the dwell period is automatically skipped.

Col. 5 lines 70 - Col. 6 line 2:

However, as soon as the rainfall decreases, or the vehicle is passed so that water from the road is no longer sprayed onto the windshield, the wiper blades will automatically stop for a predetermined dwell period at the end of each wiping cycle.

Col. 6 lines 58 - 62:

By adjusting the system so that the motor 30 does not stop in (theta) degrees under wet windshield conditions, but does stop in (theta) degrees under wet-dry windshield conditions, the desired continuous or intermittent operation is achieved automatically.

Col. 7 lines 21 - 30:

For example, a spring or other type of biasing force could be positioned to engage an element of the wiper system at a predetermined point in each wiping cycle to apply a controlled mechanical decelerating force thereto during the decelerating period to assist the drag on the wiper blades on the windshield in bringing the motor to a complete stop when the windshield is in a wet-dry condition to start a dwell period, and to skip the dwell period when the windshield is in a set condition.

Col. 9 lines 44 - 52:

Depending upon the degree-of-dryness of the windshield the motor will either continue to rotate through the angle (theta) and thereafter release the movable contacts **76** and **92** to re-energize the motor to start another wiping cycle (continuous operation), or the motor will come to a stop before the movable contacts **76** and **92** are released so that the wiper blades will dwell for a period determined by the length of time the transistors **122-126** are OFF.

Col. 12 lines 32 - 38:

If the mechanical braking, together with electrodynamic braking, is insufficient to stop the motor in (theta) degrees (the decelerating period) the contacts **76** and **92** return to the position illustrated and automatically reenergize the motor in the same manner as the

circuit of FIG. 4 to skip the dwell period.

Col. 12 lines 49 - 51:

Thus a decrease in the value of the resistor **184** will cause automatic switch between continuous and intermittent to take place when the windshield is drier.

Safety teachings of R. W. Kearns
in his U.S. Patent 3,564,374

'374 ABSTRACT OF THE DISCLOSURE

Col. 1, lines 18 - 20:

In the intermittent operation the wiper blades are responsive to the condition of the windshield.

BACKGROUND OF THE INVENTION

Col. 2, lines 3 - 9:

However, when the water on the windshield increases due to increased rain, or wheel spray from a vehicle which is being passed, it is very desirable to sense this change in condition of the windshield, automatically switch the wiper system to continuous operation while this condition prefails and automatically switch back to intermittent operation when the condition no longer prevails.

Col. 2, lines 14 - 63:

The patent to Oishei et al. 3,110,056, discloses a cam actuated switching arrangement for causing a windshield wiepr system to dwell at the end of each wiping cycle and provides an additional control responsive to acceleration of the vehicle for changing the intermittent operation to continuous operation. The latter control ;includes a switch mounted for actuation by the accelrator pedal of the vehicle or means responsive to the engine intake manifold vacuum. Thjerefore it is apparent that this arrangement is not responsive to the condition of the windshield.

I have found that n intermittent windshield weiper system which is truly responsive to the condition of the windshield can be

provided by utilizing the drag encountered by the wiper blades moving over the windshield to determine whether the wiper blades are stopped for adwell period at the end of each cycle or whether the dwell period is skipped to provide continouous operation. In accordance with one embodiment involving an electric windshield wiper system for automotive vehicles the electric motor is ded-energized at a predetermined point near the end of each wiping cycle to initiatte a declerating period during which the motor continues to rotate through a small angle due to the momentuym of the system. During the decelerating period, the drag encountered y the wiper bladesd moving over the windshield exerts a braking force on the motor which faries with thte conidition of the windshield. When the wiper lades are operarting over a wet windshield, suhj as during a heavy rainfall, they are well lubricated and the braking force is very small. When the wiper glades are operating over a wet-dry windshield, the braking force is significantly greater and decelerates ther windshield wiping systewm faster during the decelerating period so as to bring the motor to a complete stop in a fewer numvberr of degrees as compared to a wet windsheield. By selecting a number of degrees (theta) between these two positions and automatically re-energizing the motor after (theta0 degrees an effective degree-0f-dryness control is achieved. When the windshield is very wet, the motor is re-energized to start another wiping cycle before the windshield wipers come to a complete stop during the decelerating period. This skips the dwell period and sdprovides continuous operation. When the windshield is wet-dry or dry, the windshield wipers come to a complcte stop during t hde decelerating period before the motor rotates through (theta) degrees. This start a dwell period and suitable means are provided for energizing ;the motor at the end of the dwell p[eriod to start another cycle of operation.

In order to reduce the movement of th4e windshield wiper system during the decelerating period after the motor is de-energized near the end of a wiping cycle (that is, to reuduce the angle theta), additional means may be provided for decelerating the windshield wiper system. This can take the forjm of spring

elements positioned to cooperativsedly engage elements of the windshield wiper system to absorg some of the kinetic energy of the system during dthe decelrating period,d or electrical or maechanical braking meansw associated with the motor ror oth4er elements of the system. In the preferred emvbodiment, the motor is electrically braked by cosdnnecting a braking resistor thereacr-soss to dynamically brake the motor during the decelerating period. Th3 value sof the resistor is carefully selected so as to cooperate with thedrag ewncxountered by the windshild wipers moving across the windshield to bring the system to a stop in a small number of degrees after the motor is de-energized, but still at different angular position depending ont he condition of the windshield. This in effect reudced the aforementioned angle theata.

In a;ccordance with another important feature, a transistor is employed in the control circuit for controlling the operation of the windshield wiper system. The transistor is shut OFF when the motor is de-energized near the end of each wiping cycle ;and automatically turned back ON by an RC time contant circuit to re-energize the motor after a prerdetermined dwell period if the system stops for a dwell period in response to the condition of the windshield. If the condition of the windshield dictates that the dwell period be skipped by re-energizing the motor before the system comes to a compete stop as described above, the transistor is automatically turned back ON after theta degrees of rotation to re-energize the motor and start the next cycle. The lebngth of thedsdwell period is very conventient;y controlled by a variable resistor in the RC time constant circuit.

Col. 6 lines 29 - 31:

In the event a heavier rainfall is encountered, or water is sprayed on the windshield from a vehicle being passed, the dwell period is automatically skipped.

Col. 6 lines 42 - 44:

However, as soon as the rainfall decreases, or the vehicle is passed so that water from the road is no longer sprayed onto the windshield, the wiper blades will automatically stop for a predeter-

mined dwell period at the end of each wiping cycle.

Col. 7 lines 29 - 34:

By adjusting the system so that the motor 30 does not stop in (theta) degrees under wet windshield conditions, but does stop in (theta) degrees under wet-dry windshield conditions, the desired continuous or intermittent operation is achieved automatically.

Col. 7 lines 66 - Col. line 1:

For example, a spring or other type of biasing force could be positioned to engage an element of the wiper system at a predetermined point in each wiping cycle to apply a controlled mechanical decelerating force thereto during the decelerating period to assist the drag on the wiper blades on the windshield in bringing the motor to a complete stop when the windshield is in a wet-dry condition to start a dwell period, and to skip the dwell period when the windshield is in a set condition.

Col. 10 lines 13 - 20:

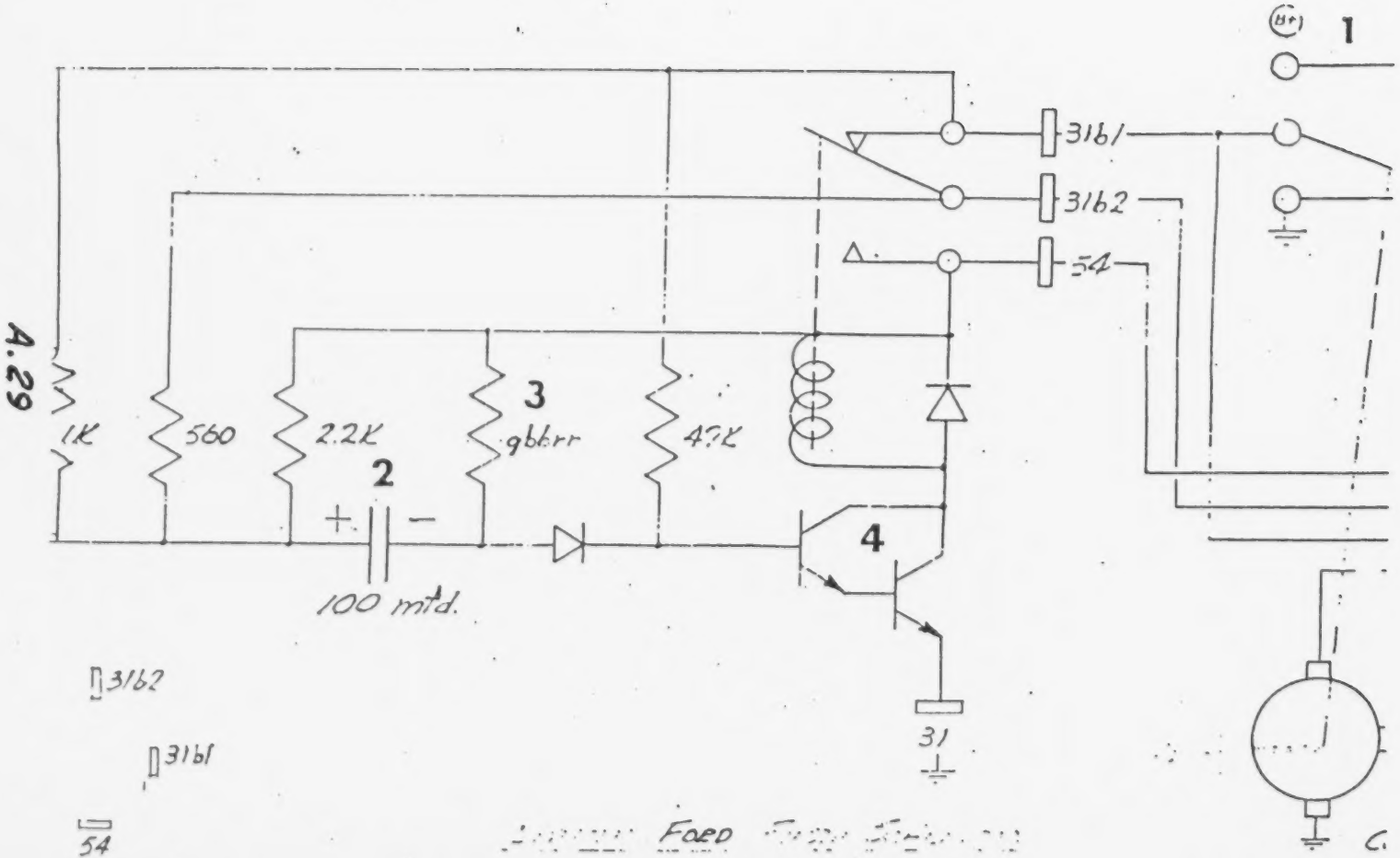
Depending upon the degree-of-dryness of the windshield the motor will either continue to rotate through the angle (theta) and thereafter release the movable contacts **76** and **92** to re-energize the motor to start another wiping cycle (continuous operation), or the motor will come to a stop before the movable contacts **76** and **92** are released so that the wiper blades will dwell for a period determined by the length of time the transistors **122-126** are OFF.

Col. 13 lines 11 - 17:

If the mechanical braking, together with electrodynamic braking, is insufficient to stop the motor in (theta) degrees (the decelerating period) the contacts **76** and **92** return to the position illustrated and automatically reenergize the motor in the same manner as the circuit of FIG. 4 to skip the dwell period.

Col. 13 lines 29 - 32:

Thus a decrease in the value of the resistor **184** will cause automatic switch between continuous and intermittent to take place when the windshield is drier.


A.29
1K
560
2.2K
3
9bbrr
47K
2
+
−
100 mfd.
4
(B+)
1
3161
3162
54
31
3162
3161
54

The numbered claim element clauses of Dr. Kearns' patents found 'not to have been shown invalid' in *Kearns* v. *Ford*

CLAIMS OF KEARNS' PATENTS

U.S. PATENT 3,351,836

Claim 16 of the '836 patent

No.	Claim element clause
12.	
1.	In a windshield cleaning system,
2.	electric motor driven windshield wiper drive means for driving wiper blade means across the windshield in repeating wiping cycles, and
3.	automatic control means for energizing said motor intermittently to produce complete wiping cycles with each wiping cycle followed by a a predetermined dwell period,
4.	said control means including
5.	transistor switch means for energizing said motor to initiate a wiping cycle and
6.	deenergizing said motor to terminate a wiping cycle,
7.	timing means to determine said predetermined dwell period, and
8.	switch means responsive to the position of said drive means for conditioning said timing means to bias said transistor switch means off

No.	Claim element clause
9.	at the end of each wiping cycle for said predetermined dwell period.
16.	The invention as defined in claim 12 wherein said automatic control means includes
10.	manually activated switch means for selectively connecting said drive means and transistor switch means in a continuous position for continuous operation of the drive means without dwell periods and
11.	in an intermittent position for said intermittent operation of said drive means.

CLAIMS OF KEARNS' PATENTS (Con't.)

U.S. PATENT 3,564,374

Claim 6 of the '374 patent

No.	Claim element clause
Claim 3.	
1.	A control device for activating motor driven windshield wiper drive means for driving wiper blades across a windshield in repeating wiping cycles comprising:
2.	(1) a timing circuit for determining repeated spaced time intervals comprising
3.	a capacitance,
4.	a resistance, and
5.	circuit means to charge said capacitance between said time intervals to provide a voltage across said capacitance at the start of each of said intervals and to connect said resistance to one side of said capacitance in an RC circuit during said intervals,
6.	said circuit jumping the potential applied

No. Claim element clause (Con't)

to the other side
of said capacitance
at the start
of each of said intervals
in a direction
to increase the voltage
across said resistance,

7. said circuit means
terminating said intervals
when the voltage
across said resistance
drops to a predetermined level,
and

8. (2) activating means
including said timing circuit
for activating said drive means
intermaittently
to provide dwell periods
between successive wiping cycles,

9. said activating means
terminating each dwell period
to initiate a wiping cycle
when the circuit means terminates
a time interval
determined by said timing circuit.

Claim 5.

A control device
as recited in claim 3
wherein
said circuit means includes

10. an electronic valve
having a first conductive condition
and a second conductive condition,

No. Claim element clause (Con't)

11. said circuit means
connecting said electronic valve
to said resistance
during said intervals
in a manner to switch
said electronic valve
from said first condition
to said second condition
to terminate each of said intervals
in response to the voltage
across said resistance
dropping to said predetermined level.

Claim 6. A control device
as recited in claim 5
wherein

12. said circuit means
includes a DC source,
wherein

13. the switching
of said electronic valve
from said first condition
to said second condition
is in response to the voltage
between a pair of electrodes
of said electronic valve
having a predetermined polarity
and reaching a predetermined level,
and

14. wherein during said intervals
said circuit means
connects said resistance
between one side of said capacitance
and one side of said DC source,

No. Claim element clause (Con't)

15. connects one of said electrodes
to the other side of said DC source,
and

16. connects
the other one of said electrodes
to said resistance,
whereby

17. the voltage
between said electrodes
will reach the predetermined level
with said predetermined polarity

18. to cause said electronic valve
to switch

19. from said first condition
to said second condition
when the voltage
across said resistance
drops to the predetermined level

20. at which said circuit means
terminates said intervals.

CLAIMS OF KEARNS' PATENTS

U.S. PATENT 3,672,790

Claim 14 of the '790 patent

No.	Claim element clause
Claim 9	
1.	A windshield wiper system for automotive vehicles comprising
2.	a DC motor connected to drive at least one windshield wiper blade through wipe cycles on an automotive vehicle windshield,
3.	said motor having three brushes so that
4.	the greater portion of said armature winding is energized when voltage is applied between a first pair of said brushes
5.	than is energized when voltage is applied between a second pair of said brushes so that
6.	said motor will run at a higher speed when energized between said second pair of brushes,
7.	motor control means having
8.	first and
9.	second conditions and

No. Claim element clause (Con't)

10. energizing said motor
between said first pair of brushes
in said first condition
and

11. energizing said motor
between said second pair of brushes
in said second condition,

12. said motor control means
in only one
of said first and second conditions

13. being operable to energize said motor
intermittently to drive said wiper
blade through repeated wipe cycles

14. with a dwell period occurring automatically at the end
of each of said wipe cycles,
and

15. a switch control movable between
first
and

16. second positions
to place said motor control means
in said first condition
or in said second condition.

13. A windshield wiper system
as recited in claim 9
wherein

17. said motor control means
comprises

18. a capacitance,

19. a resistance,

No. Claim element clause (Con't)

20. a circuit
connected to vary the charge
on said capacitance
by current flowing through
said resistance
during said dwell period,
and

21. means
responsive to the charge
on said capacitor
reaching a predetermined level
to energize said motor
to end said dwell period.

14. A windshield wiper system
as recited in claim 13
wherein

22. said means responsive
to the charge in said capacitance
reaching a predetermined level
to energize said motor
comprises

23. a solid state electronic valve
connected in a circuit

24. to become conductive
when said capacitance
reaches said predetermined level
and

25. means responsive to
said electronic valve
becoming conductive
to energize said motor.

Translation of Japanese Utility Model Patent
Publication No. 40-11768,
published April 28, 1965;
application No. 38-9445,
filed February 16, 1963;
inventor Takenori Suzaki.

AUTOMOBILE WIPER OPERATING DEVICE

Figure:

Figure is the circuit diagram of this invention.

Specification:

Usually, the movement speed of wiper for wiping automobile windshield is set as the two steps of high and low speed. But, in the case of drizzling rain, it is annoying for the eyes even by the slow speed movement of wiper. But the wiper of this invention was contrived as to move intermittently during drizzling rain without having said disadvantage.

Now, this invention is explained by figure. (W) is the wiper and moves right and left (both sides) by the motor (M) in a casing (G). (D) is the switch-box, which adjusts the speed of wiper (W), and contact-points (C_5, C_8, and C_{10}) and contact points (C_6, C_7 and C_9) are oppositely provided, respectively. An operating lever (L) is in and out movably inserted at the middle. By pulling out said lever toward F' direction, the contact piece (P) of lever end changes the contact position (II), which contacts contact points (C_5 and C_6) and the contact position (III) which contacts contact points (C_9 and C_{10}), successively. A position (I) indicates the starting position, which the contact-piece (P) is not contacted with any of contact points. Also contact points (C_6 and C_7) are short-circuited.

The contact point (C_5) is inserted in the low speed circuit of motor (M), and the contact point (C_8) is inserted in the high speed circuit of motor (M). The contact point (C_{10}) is earthed. Also, the contact point (C_7) is connected to an electric source (B).

(A) is a timing circuit containing a transistor (T), and (E) is a relay, which is operated by said timing circuit. The base (B) of transistor (T) in the timing circuit is connected at the contact point (C_9) through resistance (R_1) and condenser (C). The unipolar of electric source (B) is connected to an emitter (E) and a movable contact piece (P_1). The middle of contact point (C_9) and condenser (C) is connected at the one end of relay coil (F) also is connected with the movable contact piece (P_2). Usually, the contact pieces (P_1) and (P_2) are maintained at the solid line position by the action of spring and connected to the contact points (C_1 and C_3). But when the relay coil (F) is excited, it is drawn in and moves to the position of dotted line, respectively. The contact piece (P_1) connects to the contact point (C_2), and the contact piece (P_2 contacts to a stop (C_4).

The contact point (C_2) connects to the middle of motor (M) and the contact point (C_5). The other end of relay coil (F) has been connected to the collector (C) of transistor. The middle of resistance (R_1) and the condenser (C) has been connected to the contact point (C_3) via resistance (R_2).

The resistances (R_1) and (R_2) are combined with the condenser (C) and decide the time constant. At the same time, the resistance (R_1) acts as the resistance of transistor and base (B).

Now the function of this device is explained.

(a) In the case of operating lever (L) locating at the position (I) in the switching box (D), the wiper (W) is in the stop condition.

(b) In the case of the operating lever (L) locating at the position (II), the low speed circuit of wiper motor (M) works because the contact piece (P) short circuits the contact points (C_3) and (C_5), and the wiper (W) continuously swings right and left (both sides) by low speed.

(c) In the case of the operating lever (L) locating at the position (III), the contact piece (P) short-circuits the contact points (C_7) and (C_8), and the high speed circuit of motor (M) works. Then, the wiper (W) continuously swings by high speed.

(d) When the operating lever (L) reaches to the position (IV), the contact piece (P) short-circuits with the contact point $(C_9)_2$ and places the timing circuit (A) at the working condition. Then, an electric current flows from the circuit of the electric source (B) → transistor, emitter (E) → base (B) → resistance (R_1) → condenser (C) → contact points (C_9), (C_{10}) → earth (⏚).

Therefore, the transistor (T) enters to the working condition, and the relay coil (F) excites by the circuit of emitter (E) → collector (C) → relay coil (F) → contact points (C_9), (C_{10}) → earth (⏚). Then, the contact pieces (P_1) and (P_2) are drawn to the dotted line position, respectively. Consequently, the wiper (W) starts the sweeping movement by the circuit (⎍) of electric source (B) → contact point (C_2) → motor (M) → earth (⏚), and a short while after the condenser (C) is charged. Then circuit (T) current stops, at the same time, the plus side of condenser charging voltage becomes to the reverse bias to the transistor. Then, the transistor (T) becomes inactivity. Also, the circuit (⎍) becomes inactivity. Therefore, the relay coil (F) excites, and the connect pieces (P_1) and (P_2) return to the solid line position, respectively. At the same time, the current of circuit (⎍) stops, and the swinging movement of wiper (W) stops. Then the charging voltage of condenser (C) starts to discharge from the resistance (R_2) → connect piece (P_2) → earth, and the reverse bias of base of transistor is removed. And again the transistor works, and said circuits (⎍) (⎍) (⎍) work, successively, and the movement of wiper starts.

As explained above, the wiper (W) intermittently swings by time constant by combining the resistances (R_1) (R_2) and the condenser (C). Therefore, the annoyance of eyes by the wiper movement is eliminated. At the same time, because of using timing circuit of transistor by this invention, the structure is simple and the capacity of device is small. Also, the cost of maintenance is low.

Moreover, if a variable resistance is used for the resistances (R_1) and (R_2), the spacing time of wiper movement and stop is expectedly adjustable.

Claim.

An automobile wiper operating device provided the contact points for high speed driving and low speed driving of wiper in a switching box (D), also the contact points (C_9) and C_{10}) were provided, which allowed the insertion of circuit (A) when the transistor was used. Also, the contact point (C_{10}) was earthed (⏚), and the contact point (C_9) was connected to the transistor base via the condenser (C) and the resistance (R_1), and the electric source (B) was connected to the emitter and the movable contact piece (P_1). The middle of contact point (C_2) and the condenser (C) was connected to one end of relay coil (F) and the movable contact piece (P_2). The other end of relay coil (F) was connected to the transistor collector. Usually the movable contact piece (P_1) is at "off" position, and the movable connect piece (P_2) is connected at the middle of resistance (R_1) and the condenser (C) via the resistance (R_2). Then, the movable contact piece (P_1) connects to the motor circuit by the excitation of relay coil, and the movable contact piece (P_2) is as to move at the "off" position.

特許庁　　実用新案出願公告
00 H 5　　実用新案公報　　昭40-11763
公告　昭40. 4. 23
（全2頁）

自動車ワイパー操作装置

実願　昭 38-94465
出願日　昭 38. 2. 16
考案者　出願人に同じ
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東京都大田区久ヶ原町356
代理人　弁理士　斉井秋雨

図面の簡単な説明

図面は本考案装置の回路図である。

考案の詳細な説明

普通、雨天に際し自動車の窓ガラスを拭拭するワイパーの運動速度を高速2段に変更できるようになつているが、微雨の場合、この速度でもワイパーの動きが目に煩わしいことが多い。本案によると、此の欠点を除き、微雨に際してはワイパーを間歇的に動かすように工夫した。

今、図面に就き説明すると、図中Wはワイパーでケーシング C 内のモーター M により左右運動する。D はワイパーW の運転速度を変速するスイッチ函で、その内面に接点 C_1、C_2、C_{10} と接点 C_3、C_7、C_9 をそれぞれ対設し、中間に操作杆 L を出し入れ自在に挿入し、該杆を矢 F′ の方向へ引出すことにより杆端の接片 P が接点 C_1、C_2 と接触する位置 I、接点 C_7、C_8 と接触する位置 II 及び接点 C_9、C_{10} と接触する位置 III と順次接触位置を変更する。尚位置 I は接片 P が何物にも接触していない最初位置を示す。又接点 C_8、C_9 に短絡されている。

接点 C_1 はモーター M の低速巻線内に、接点 C_2 はモーター M の高速巻線内に挿入され接点 C_{10} はアースされている。又、接点 C_7 は電池 B に接続している。

A はトランジスター T を含む時限回路、又 B は整流整圧器により操作されるリレーである。尚図面に於てトランジスター T のベース B は抵抗 R_1 とコンデンサー C を介し接点 C_3 に接続し、電池 B の一極はエミッター E と可動接片 P_1 に接続し、接点 C_4 とコンデンサー C の中間はリレーコイル F の一端と接続し又可動接片 P_2 とも接続している。尚両接片 P_1、P_2 は夫々位置にスプリング作用により保持され、接点 C_1、C_2 と接触しているがリレーコイル F が励磁すると、之れにより吸引されそれぞれ点線位置へ動き接片 P_1 は接点 C_2 に、又接片 P_2 はストップ C_4 と接触する。

接点 C_3 はモーター M と接点 C_4 の中間に接続しリレーコイル F の他端子はトランジスターのコレクター C と接続している。抵抗 R_1 とコンデンサー C の中間に抵抗 R_2 を介し接点 C_3 と接続している。

抵抗 R_1、R_2 はコンデンサー C と組合わされて時定数を決定すると共に抵抗 R_1 はトランジスター、ベース B 抵抗として作用する。

次に本考案の作動を説明すると、

（a）スイッチ函 D に於て操作杆 L が位置 I にある場合はワイパー W は停止状態にある

（b）操作杆 L が位置 I にある場合は接片 P が接点 C_1、C_2 を短絡するのでワイパーモーター M の低速回路が作動しワイパー W は低速で左右往復的に運動する。

（c）操作杆 L が位置 II にある場合、接片 P は接点 C_7、C_8 を短絡しワイパー M の高速回路が作動し、ワイパー W は高速で往復的に運動する。

これまでは現行のワイパー操作装置の作動と全く同じであるが、

（d）操作杆 L が位置 III に来ると接片 P が接点 C_9、C_{10} と短絡して時限回路 A を作動状態に置き電池 B ー トランジスタ、エミッター E ーベース B ー抵抗 R_1 ーコンデンサー C ー接点 C_3、C_{10} ーアース（イ）の回路に電流が流れるからトランジスター T が作動状態に入りエミッター E ーコレクター C ーリレーコイル F ー接点 C_4、C_{10} ーアース（ロ）の工路によつてリレーコイル F が励磁し接片 P_1、P_2 をそれぞれ点線位置へ吸引するから

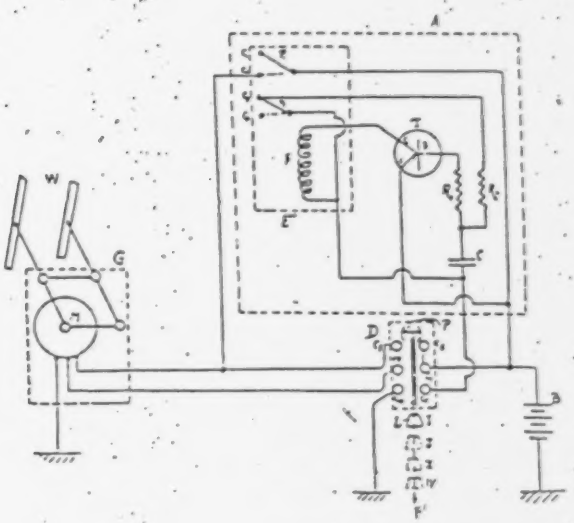
電池 B ー接点 C_3 ーモーター M ーアース（ハ）の回路によつてワイパー W が低速運動を開始すると同時にコンデンサー C が充電され（イ）回路電流が停止すると共にコンデンサー充電電圧のプラス側がトランジスターに対し逆バイアスとなるのでトランジスター T は不作動となる。従て（ロ）回路も不作動となるためリレーコイル F は復旧するから接片 P_1、P_2 はスプリング作用によりそれぞれ実線位置へ復帰すると共に（ハ）回路の電流も停止し、ワイパー W の運動が停止する。そ

してコンデンサーCの充電電圧に抵抗 R_1 一接片 P_1 ーアースと位置を占め トランジスター のベース逆バイアスが除かれトランジスターが再び作動し、(第2 (イ)、(ロ)、(ハ) 図)が同様に作動してワイパー作動が開始する。

以上の如くしてバイラーWは抵抗 R_1、R_2 コンデンサーCの組合せによる時定数により間欠的に回転するからワイパーの動作が目を遮わす流れを除去できると共に、本案によるとトランジスター ノ増幅回路を利用するもの故、微速回転且微回転容量が小であり更に起動力が極端である又抵抗 R_1 R_2 に可変抵抗を利用するとワイパー運動と停止との間隔時間を希望通り調整出来る効果がある。

実用新案登録請求の範囲

スイッチ面D内にワイパー低速回転用接点と高速回転用接点を設置する以外にトランジスターを使用した時間路Aの挿入を許す接点 C_1、C_2 を設け接点 C_1 をアースし、接点 C_2 をコンデンサー Cと抵抗 R_1 を介しトランジスターベース、電源 Bをエミッター並可動接片 P_1 に接続し、接点 C とコンデンサー C の中間をレーヨイルFの一端と可動接片 P_2 に接続しリレーコイルFの他端をトランジスターコレクターに接続し固定可動接片 P_3 はオフ又可動接片 P_4 は抵抗 R_2 を介し抵抗 R とコンデンサー C の中間にそれぞれ接続しリレーコイルFの動作に際し可動接片 P_3 にモーター回路に接続し可動接片 P_4 にオフ位置に回路オフするようにした自動車ワイパー装置。



A. 44

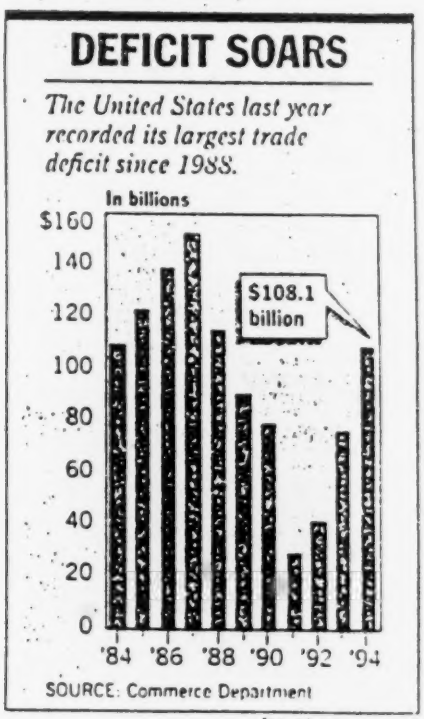
Plaintiffs 956 Exhibit	Intermittent Windshield Wipers **Profit as a Share of Revenues** All U.S. and Canadian Vehicles 1978 - 1988			
Year	U.S.		Canada	
	Variable Profit	Net Profit	Variable Profit	Net Profit
1978	0.80	0.76	0.90	0.89
1979	0.86	0.83	0.87	0.85
1980	0.86	0.82	0.87	0.83
1981	0.81	0.73	0.83	0.75
1982	0.84	0.76	0.86	0.79
1983	0.85	0.81	0.87	0.86
1984	0.86	0.82	0.85	0.80
1985	0.87	0.84	0.85	0.81
1986	0.85	0.81	0.84	0.80
1987	0.86	0.85	0.83	0.82
1988	$0.93	$0.92	$0.93	$0.92
Weighted Average	0.85	0.82	0.87	0.83
Weighted Average All U.S. and Canada			0.85	0.82

The Washington Post

SATURDAY, FEBRUARY 18, 1995

U.S. Trade Deficit Rose Sharply Last Year

$108.1 Billion Is Largest Imbalance Since '88



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Plaintiffs
955
Exhibit

Intermittent Windshield Wipers
Variable and Net Profit
All U.S. and Canadian Vehicles 1978 - 1988

Year	U.S.		Canada	
	Variable Profit	Net Profit	Variable Profit	Net Profit
1978	$20.35	$19.31	$46.47	$46.19
1979	$25.99	$25.15	$27.79	$27.24
1980	$28.01	$26.58	$29.64	$28.38
1981	$27.90	$25.05	$30.98	$28.00
1982	$32.17	$29.28	$37.20	$34.15
1983	$36.03	$34.31	$41.53	$41.19
1984	$37.38	$35.64	$34.18	$32.21
1985	$38.61	$37.12	$32.85	$31.12
1986	$37.93	$36.25	$32.75	$31.08
1987	$41.33	$41.08	$31.32	$30.98
1988	$45.12	$44.54	$41.37	$40.93
Weighted Average	$31.16	$29.59	$34.68	$33.33

Weighted Average All U.S. and Canada	$31.46	$29.91

DEFENDANT'S EXHIBIT 952

5-20-92 MODIFIED

Intermittent Windshield Wiper "Profit" Analysis

Year	Price per IWW	Number of Units[1] in Chrysler Exhibit D 592	Number of Units[1] Stipulated Kearns v. Chrysler	Maximum Total Revenues from IWW per Exhibit D 952	Maximum Total Revenues from IWW as Stipulated Kearns v. Chrysler
1977	$28.32	26,771	26,771	$758,154.72	$758,154.72
1978	$28.32	516,955	553,452	$14,640,165.60	$15,673,760.64
1979	$30.38	606,671	575,316	$18,430,664.98	$17,478,100.08
1980	$32.68	485,986	282,276	$15,882,022.48	$9,224,779.68
1981	$34.45	375,275	344,900	$12,928,223.75	$11,881,805.00
1982	$38.83	445,864	415,042	$17,312,899.12	$16,116,080.86
1983	$42.97	592,012	763,158	$25,438,755.64	$32,792,899.26
1984	$42.95	752,668	1,241,431	$32,327,090.60	$53,319,461.45
1985	$43.81	912,842	1,632,542	$39,991,608.02	$71,521,665.02
1986	$44.47	954,075	1,654,450	$42,427,715.25	$73,173,161.50
1987	$47.91	502,667	1,724,189	$24,082,775.97	$82,605,894.99
1988	$48.24	249,273	1,789,465	$12,024,929.52	$86,757,951.60
1989	$48.24	68,133	337,729	$3,286,735.92	$16,292,046.96
	Total	6,489,192	11,340,721	$259,531,741.57	$487,595,761.76

[1] Chrysler Automotive North America only; AMC 1,223,386 stipulated units omitted because Exhibit D 952 does not include AMC units.

PLAINTIFF'S EXHIBIT 1009

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